EXHIBIT 1

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

JENNIFER HASEMANN and DEBBIE HOTH, individually and on behalf of all others similarly situated, Plaintiffs, v. GERBER PRODUCTS COMPANY, Defendant.	No. 1:15-cv-02995-MKB-RER
JERREMY GREENE and CETARIA WILKERSON, individually and on behalf of all others similarly situated, Plaintiffs, v. GERBER PRODUCTS COMPANY, Defendant.	No. 1:16-cv-01153-MKB-RER
WENDY MANEMEIT, individually and on behalf of all others similarly situated, Plaintiff, v. GERBER PRODUCTS COMPANY, Defendant.	No. 2:17-cv-00093-MKB-RER

DECLARATION OF STEFAN BOEDEKER
IN SUPPORT OF PLAINTIFF'S MOTION FOR CLASS CERTIFICATION

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1 Introduction

1.1 Qualifications

1. I am a Statistician and an Economist. I received a Bachelor of Science degree in Statistics and a Bachelors of Arts degree in Business Administration from the University of Dortmund/Germany in 1988. I received a Master of Science degree in Statistics from the University of Dortmund/Germany in 1988, and I received a Masters of Arts degree in Economics from the University of California, San Diego in 1992. I also completed Ph.D. requirements (except dissertation) in Economics at the University of California, San Diego.

2. I am currently employed as a Managing Director at the Berkeley Research Group ("BRG") in one of its Los Angeles area offices at 550 South Hope Street, Suite 2150, Los Angeles, CA, 90071. Prior to joining BRG, I was a Partner at Resolution Economics. I also held Managing Director positions at Alvarez & Marsal, Navigant Consulting, and LECG. I also held partner-level positions at Deloitte & Touche LLP, PricewaterhouseCoopers LLP, and Arthur Andersen LLP. At the three latter firms, I was responsible for the Economic and Statistical Consulting group on the West Coast. Before moving to the United States to attend graduate school, I worked as a statistician for the German Government for three years, from 1986 to 1989.

3. For over 25 years, my work has focused on the application of economic, statistical, and financial models to a variety of areas, such as providing solutions to business problems, supporting complex litigation in a consulting and expert witness role, and conducting economic impact studies in a large variety of industries including, but not limited to, healthcare, retail, grocery manufacturing, technology, entertainment, manufacturing, automotive, energy and utilities, hospitality, and federal, state, and local government agencies.

4. I have extensive experience designing and conducting surveys and empirical studies as well as statistically analyzing results from surveys and empirical studies in both the litigation context as a consultant and/or designated expert and the non-litigation context as a statistical or economic consultant. I have issued numerous expert and rebuttal reports dealing with

surveys and statistical sampling related issues. I have been deposed on numerous occasions, and have also testified in court regarding survey and statistical sampling-related issues.

5. I am not an expert on the manufacturing of infant formula products. I do not have an opinion one way or the other about the allegations in this case. Instead, I have relied on my experience and expertise and have purely applied statistical methodologies based on the assumptions provided herein as to the alleged false statements at issue in this litigation outlined in the Complaint and per the instructions of plaintiffs' counsel.

6. All the facts and circumstances set forth in this report are known to me personally and I am prepared to testify to them if called upon to do so. My curriculum vitae which includes matters in which I have testified is attached to this report as Exhibit A. BRG is being compensated for its work on this matter based on an agreed upon hourly billing rate schedule. My hourly billing rate for professional services related to this case is $650 and the billing rates of BRG staff supporting me on this engagement range from $150 to $550. BRG's payment in this matter is not contingent upon my opinions or the outcome of this litigation.

1.2 Case Background

7. It is my understanding that the defendant Gerber Products Co. d/b/a Nestle Nutrition, Nestle Infant Nutrition, and Nestle Nutrition North America ("Gerber") is alleged to have deceptively and misleadingly marketed "Good Start, a line of infant formula made with whey-protein concentrate"[1] with respect to its claim that the product "is the first and only formula whose consumption reduces the risk of infants developing allergies" and that "Good Start is the first and only formula that the United States Food and Drug Administration ("FDA") endorses to reduce the risk of developing certain allergies, such as dermatitis."[2]

8. It is further my understanding that there is no credible scientific evidence to substantiate the qualified health claim made by Gerber that consumption of Good Start can reduce the risk of developing allergies.

[1] Class-Action Complaint, 1/6/17, paragraph 2.
[2] Class-Action Complaint, 1/6/17, paragraph 3.

9. It is further my understanding that Plaintiffs allege the "reduce the risk of developing allergies" claim is an express claim that appeared on the packaging of Gerber Good Start products.

10. It is further my understanding that Plaintiffs allege that Gerber's claim is literally false. As such, it is my understanding that Plaintiffs allege that they have overpaid for a product that does not provide the promised benefits.[3]

11. It is my further understanding that Plaintiffs allege that some of Gerber's claims were misleading and implied (among other things) that the FDA's qualified health claim was in fact a blanket endorsement of Good Start, generally, or that Good Start could unqualifiedly reduce the risk of atopic dermatitis.[4]

1.3 Assignment

12. I have been retained by counsel for Plaintiffs to opine on the feasibility of developing an economic loss model to quantify the damages, if any, suffered by the proposed class that are attributable to the purchase of a product that was not as presented and advertised to the consumers. If the proposed class is certified by the Court, my assignment will be to develop and perform an empirical study to assess the value that customers who purchase infant formula products place on the claims at issue here, including that a product can reduce the risk of developing allergies, generally, and that the FDA endorsed a formula when, in fact, it did not.[5]

13. I would then use the results of the empirical study and other data to develop an econometric/statistical model to quantify and estimate class-wide damages to purchasers of Gerber Good Start products with the alleged misstatements due to not receiving benefits and features that they paid for and that they were led to believe the Gerber Good Start products possessed.

14. One could argue that the entirety of the actual purchase price of a Gerber Good Start product could be fully included in an economic loss model because the purchasers of a product with a

[3] Class-Action Complaint, 1/6/17, paragraph 13.
[4] Class-Action Complaint, 1/6/17, paragraphs 56–58.
[5] Class-Action Complaint, 1/6/17, paragraph 55.

false claim did not receive what was advertised and what they intended to purchase. In my analysis, I consider that consumers may still have obtained some value from the purchase of the Gerber Good Start products at issue in this litigation even though they did not provide the advertised benefits, such as reducing the risk of developing allergies, generally. This implies that the economic loss to the purchaser may have been less than the entirety of the purchase price of the product. However, it cannot be ruled out that the economic loss is equal to or even greater than the purchase price. This concept is discussed in more detail in Section 6.3.

1.4 Materials Considered

15. In forming my opinions for this report, I have considered the following materials:

a. Class Action-Complaint, dated January 6, 2017.
b. Plaintiffs' Statement of Facts in Support of Their Motion for Class Certification

16. In addition, I have considered all materials cited in the text and in the footnotes to this report.

1.5 Structure of the Report

17. The remainder of this report is structured as follows:

a. Section 2 gives a brief overview of the formula market.
b. Section 3 gives an overview of the theoretical framework of the economic loss model based on supply, demand, equilibrium price setting mechanisms, and the relationship between consumers' willingness-to-pay for a product or features of a product and market prices.
c. Section 4 discusses the methodology of the empirical study that I would perform for this matter. In Section 4, I also introduce Choice Based Conjoint Analysis as a tool to quantify the impact of changing market conditions on consumers' choices and willingness-to-pay.
d. Section 5 contains a detailed description of the empirical study that I would perform to quantify the impact of changing market conditions on consumers' preference and choices and if and how changes in demand may affect equilibrium prices.

e. Section 6 discusses how I would apply advanced statistical estimation techniques to obtain economic losses suffered by members of the proposed class, if any, based on the results from the conjoint study.

f. Section 7 concludes that it is possible to reliably quantify class-wide economic losses based on the proposed methodology and the results from an actual properly designed and implemented conjoint study.

2 The Market for Formula Products

18. Infant formula is a synthetic product that closely mimics the physical and nutritional properties of breast milk. It provides an alternative method for mothers to feed their infants and is typically designed for babies and infants under one year of age. It is made by blending fats, oils, proteins, sugars, minerals, salts, and trace elements together in an attempt to mimic the characteristics of breast milk.

19. There are three categories of formula: milk-based formulas, soy-based formulas, and specialized (non-milk and non-soy-based) formulas. The three categories are designed to fit an infant's needs depending on whether the infant has sensitivity or an allergic reaction to milk or soy-based products. Formulas are also available in three different forms: powder, liquid concentrate, and ready-to-feed. Powder and liquid concentrate are the cheapest options available and ready-to-feed is the most expensive. Ready-to-feed bottles eliminates the potential for contamination because no mixing is required prior to feeding the infant.

20. Although many health organizations recommend breast feeding as the preferred way of feeding infants, the market for infant formula has grown in the past few decades. This is due to the progress that has been made in the composition of the formula, safety standards that have been developed, and the increased participation of women in the workforce. Globally, the infant formula market reached $26.5 billion in 2017 and is expected to grow at a compound annual growth rate of 9.5%.[6] In 2014, North American consumers accounted for 42% of sales, European consumers accounted for 24%, Latin American consumers accounted for 12%,

[6] https://www.prnewswire.com/news-releases/infant-formula-market-to-surpass-a-valuation-of-more-than-us-66-bn-by-2027-673897923.html

African and Middle Eastern consumers accounted for 11%, and Asian consumers accounted for 10% of sales. Developing markets are the fastest growing markets for infant formula. Latin America grew 46.8% in 2014 and Africa and the Middle East grew at 13.4%. North America grew 0.9% and Europe grew 5.6%.[7]

21. The infant formula market is highly consolidated. The U.S. market is dominated by four main competitors: Mead Johnson, Abbott, Gerber, and private label. The biggest drivers of growth for infant formula are brand name, nutrition, and safety. In developed markets, price is also an important purchase consideration.

3 Theoretical Framework of Economic Loss

22. In this section, I use a generic example to describe in basic economic terms how prices are set for products and how it can be tested if damages exist, and if they do exist, how to quantify them and how to determine the appropriate class-wide compensation.

3.1 Demand and Supply in a Competitive Market

3.1.1 Willingness-to-Pay

23. In economic theory, willingness-to-pay is derived from "Utility." Utility describes a consumer's preferences and it is a measure of the value or usefulness of a good or service to that consumer.[8] Therefore, utility does not have a unit of measurement. The empirical study developed in this report allows the researcher to associate a monetary value to a consumer's utility.

24. To explain the concept, let us assume that it is known how much benefit or utility each consumer in a given market derives from a product or service. The willingness-to-pay is the highest price a consumer is willing to pay for the product, which is based on the perceived utility derived from the product and the consumer's budget. The consumer will purchase the

[7] Nielsen Global Baby Care Report, "Trends in the Global Baby Food and Diaper Markets." Available at http://www.nielsen.com/content/dam/nielsenglobal/de/docs/Nielsen%20Global%20Baby%20Care%20Report%20-%20August%202015.pdf.
[8] Hal R. Varian, Intermediate Microeconomics, 8th Edition, 2009, Page 54.

product if the market price of the product is lower than or equal to his willingness-to-pay, but he will not purchase the product if the price is higher than the willingness-to-pay.

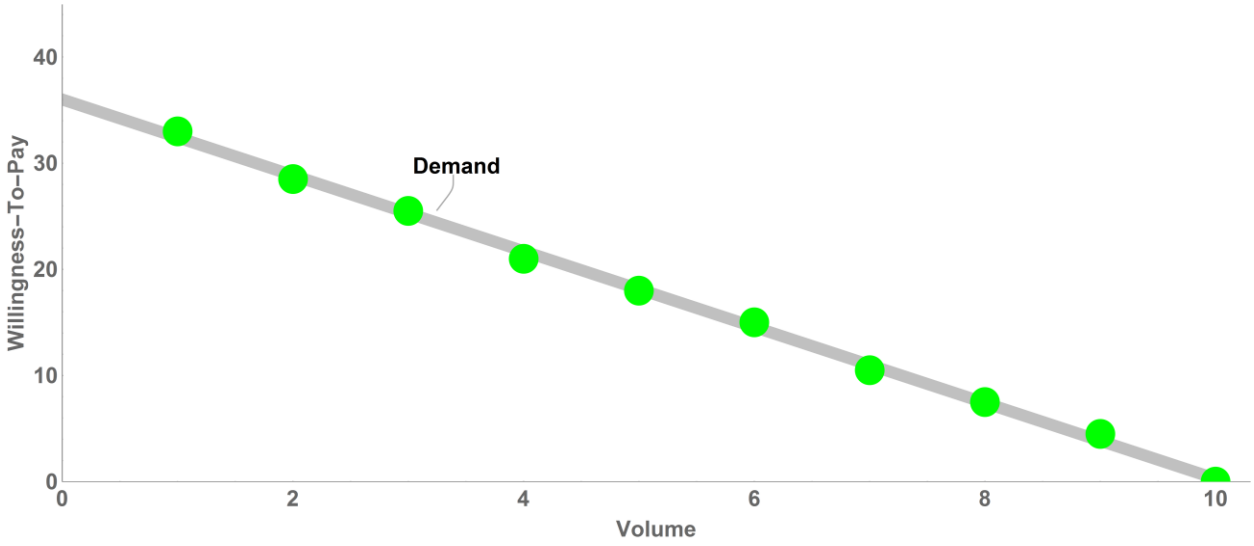
25. In that sense, the individual willingness-to-pay for a product differentiates the buyer from the non-buyer for a certain product. There is no other correlation between the individual willingness-to-pay and the market price. In this context, the marginal consumer is defined as the consumer whose willingness-to-pay equals the market price.

26. With this knowledge, it is now possible to rank the consumers by their willingness-to-pay. As an illustrative example, let us assume that the consumer with the highest willingness-to-pay is willing to spend $33 for a brand new widget. If the price of the product were $33, this consumer would purchase the product but nobody else would. This consumer would also buy the product for any price less than $33. If there is an additional consumer with the next highest willingness-to-pay of $28, then this consumer and the consumer with a willingness-to-pay of $33 would purchase the product, and so forth. Each consumer would buy the product at a price that is equal to or less than their respective willingness-to-pay. If a consumer's willingness-to-pay is less than the price for the product, then this consumer will not buy the product.

27. Based on the ranking of consumers by their willingness-to-pay, a demand curve can be constructed in the following way: In a diagram that depicts the amount of the willingness-to-pay for each individual consumer on the vertical axis and the number of consumers on the horizontal axis, the demand curve will begin in the top left corner at the intersection of one consumer and a willingness-to-pay of $33. The next data point is at the intersection of two consumers and a willingness-to-pay of $28, and so forth.

28. The demand curve would look like a downward facing set of stairs. For simplicity, textbooks typically stylize the demand curve as a smooth downward sloping line or curve. Figure 1 below illustrates this concept.

Figure 1: Willingness-to-Pay and Demand



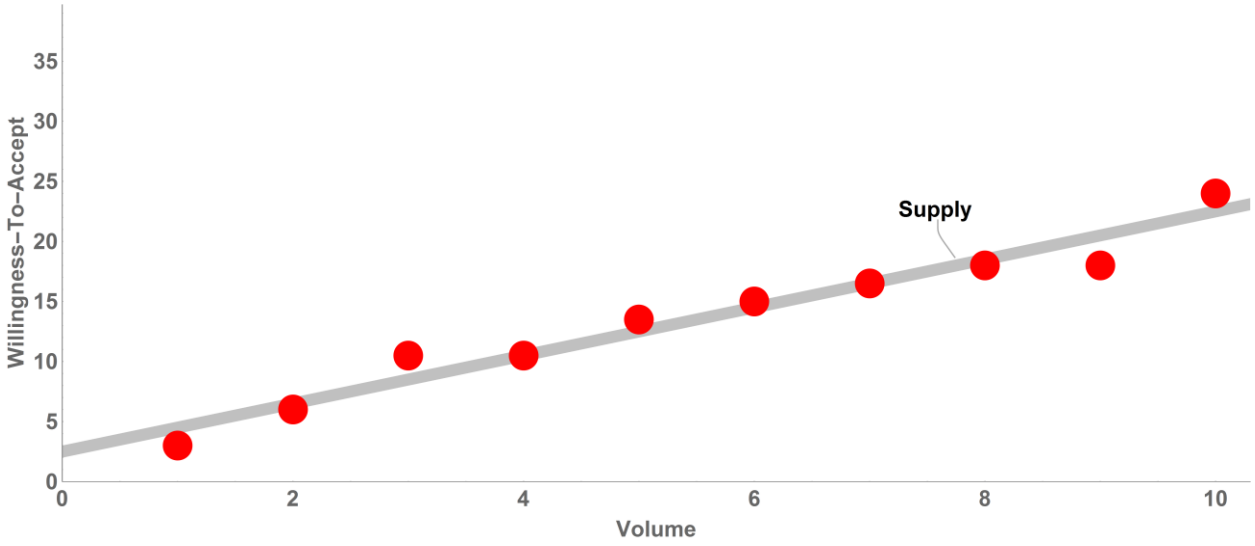
Source: Own analysis based on hypothetical data

3.1.2 Willingness-to-Accept

29. Following the same principle as in the example of developing the demand curve, we can also determine the minimum price at which each manufacturer is willing to sell the product. This is called the willingness-to-accept, which is equal to the marginal cost to the manufacturer. The marginal cost is the cost the manufacturer incurred when producing the last or marginal unit of the product.

30. Like the consumers on the demand side, the manufacturers can be ranked by their willingness-to-accept. In a diagram with volume on the horizontal axis and prices and willingness-to-pay on the vertical axis, the manufacturer with the smallest marginal costs, say $3, will be positioned on the left. If the price of the product were to be just above $3, only this manufacturer would be willing to accept the price. Assuming that the next manufacturer offers one unit for $6, at the price of $6 two units would be offered in the market and so on. When connecting all ranked values of willingness-to-accept, we get the supply curve. It typically slopes upwards from left to right. The supply curve would look like an upward facing set of stairs. For simplicity, textbooks stylize the supply curve as an upward sloping smooth line or curve. Figure 2 below illustrates the concept.

Figure 2: Willingness-to-Accept and Supply

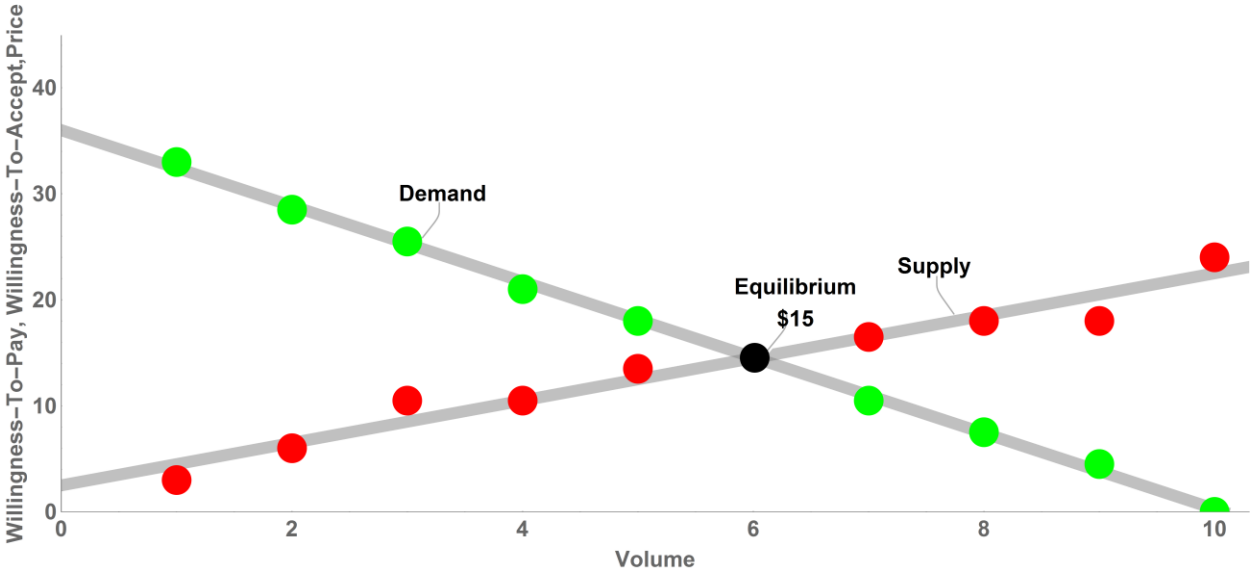


Source: Own analysis based on hypothetical data

3.1.3 Market Equilibrium

31. The market balances supply and demand. At a price of $4.50, almost all consumers in my example would purchase the product but the manufacturers would offer only one unit. Conversely, at a price of $33, only one consumer would be willing to purchase the product while all manufacturers would be willing to sell the product. In the generic example, the market clears at a price of $15. At this point, not all but most consumers and manufacturers will be brought together. In the graphical representation, the supply and demand curves intersect (Figure 3). If the price exceeds $15, more manufacturers would offer their product but fewer consumers would be willing to purchase the product. If the price drops below $15, more consumers would be willing to purchase the product but fewer manufacturers would be willing to sell the product. For the marginal consumer, the equilibrium price of $15 is equal to the willingness-to-pay; and for the marginal manufacturer, the equilibrium price of $15 is equal to the willingness-to-accept.

Figure 3: Supply & Demand



Source: Own analysis based on hypothetical data

32. The equilibrium price is not the simple average of all consumers' willingness to pay. Rather, the equilibrium price depends on supply and demand. The equilibrium price is the price where the supply curve and the demand curve intersect. Every consumer to the left of the marginal consumer has a willingness-to-pay that exceeds the equilibrium price, and therefore, will purchase the product.

33. The difference between the willingness-to-pay and the market price can also be illustrated with a real-world example: In an eBay auction, I may have put my eye on an item. I put my upper limit for my bids at $50. This upper limit signals my willingness-to-pay. Given that willingness-to-pay, if I saw the same item with a "Buy it Now" price tag of $25, I would buy it for $25. What happened in this example? Did my utility from purchasing the item suddenly change? Did my willingness-to-pay change? Obviously not. However, what has changed is that the projected amount that I would pay going through the bidding process is different than the price I will pay when the competing offer is presented to me. In other words, the willingness-to-pay does not necessarily reflect the actual price that a consumer ends up paying for a product.

3.2 Shifting Demand Curves and Changes in Equilibrium Price

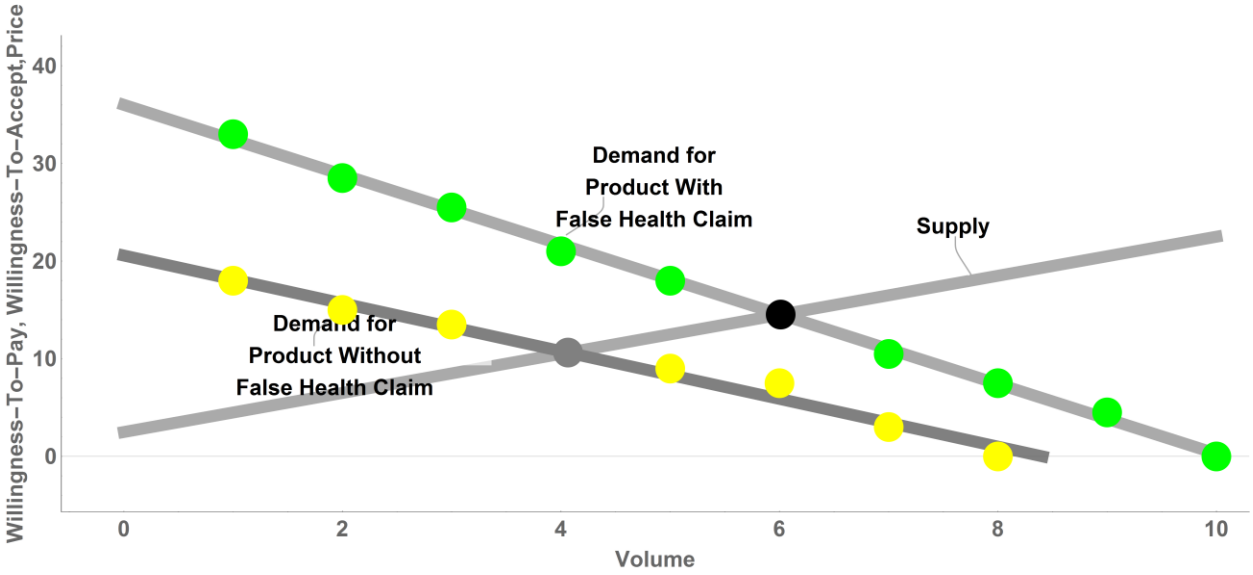
34. Based on Lancaster's theory of utility,[9] the utility a consumer derives from a product and, therefore, the consumer's willingness-to-pay for the product is aggregated from the willingness-to-pay for each of the product's characteristics, parts, and features. In this case, the product is infant formula and the characteristics of the product include nutritional information, health claims, formulation (i.e., powder, liquid, or ready-to-feed[10]), class (i.e., cow-milk based, soy-based, and specialized[11]), and other features.

35. A consumer's overall willingness-to-pay for the entire infant formula product is equal to the weighted sum of the willingness-to-pay the consumer expresses for each individual attribute. Changes in the composition of the attributes may lead to a shift of the demand curve for the infant formula product. The change in the composition of the product's attributes can relate to changes in tangible attributes such as nutritional value or health benefits. It can also relate to statements about the product and advertised features of the product that are used to market the product to the consumers. In the case where statements used for marketing purposes are alleged to be false and misleading, it has to be determined if and by how much the demand curve shifts when the consumers learn about the false and misleading statements at the point of purchase. If the demand curve shifts downward, some consumers may still be willing to buy the product but at a lower price and some consumers may no longer be willing to buy the product. Figure 4 below illustrates the scenario:

    a. Where one or more of the claims about the product are false or misleading, and
    b. Where the consumers receive information about this false or misleading claim at the point of purchase.

[9] Lancaster, Kelvin J. (1966), "A New Approach to Consumer Theory," Journal of Political Economy 74 (2): Pages 132–157.
[10] Review of Infant Feeding: Key Features of Breast Milk and Infant Formula, Section 4.1 The Infant Formula Market. Available at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4882692/.
[11] Review of Infant Feeding: Key Features of Breast Milk and Infant Formula, Section 4.3 Classes of Infant Formula Products. Available at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4882692/.

Figure 4: Shift in the Demand Curve and the Effect of the Equilibrium Price



Source: Own analysis based on hypothetical data

36. In the following paragraphs, I will refer to the situation where the consumer bought the infant formula without having the knowledge that certain information is false and misleading as the "actual world" and the situation where the consumer was informed at the point of purchase of the false and misleading information about the infant formula as the "but-for world."

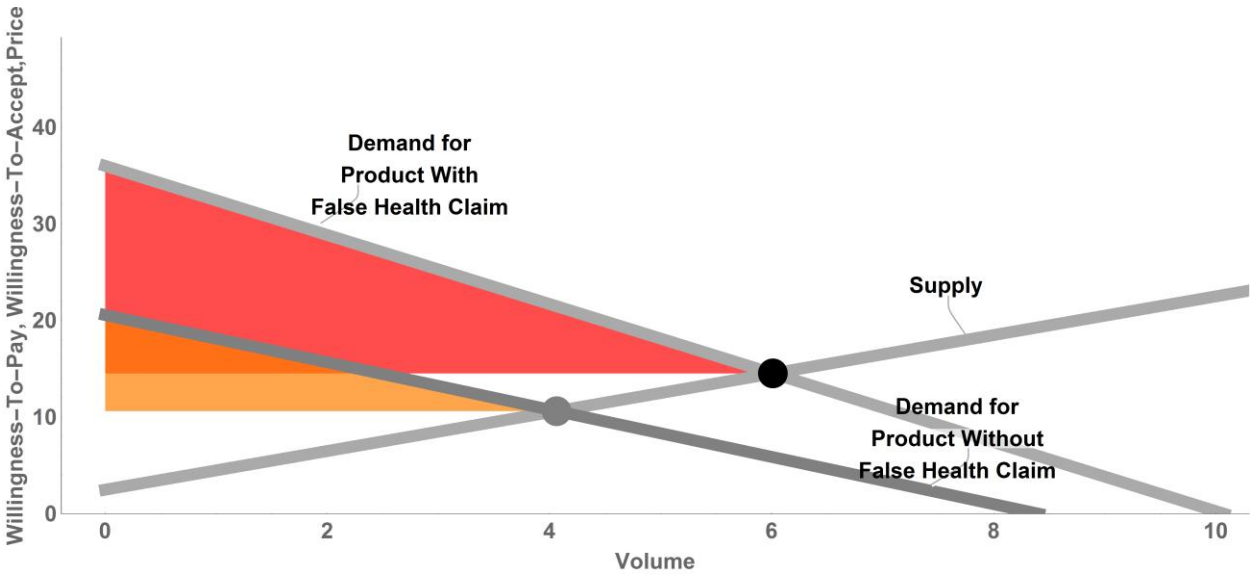
37. If consumers are willing to pay less for the product knowing that the advertised claim was false in the but-for world, then it can be empirically tested how this new information impacts the demand for the product. If the demand curve shifts downward, then a drop in overall willingness-to-pay can be observed, although the drop in willingness-to-pay may vary across consumers. The consumers are ranked again according to their willingness-to-pay, resulting in the yellow dots in Figure 4, which defines the new demand curve.

38. The new demand curve may have a different shape than the demand curve for the product where the consumer does not know that the claim is false. All else equal, the shift of the demand curve results in a new market equilibrium, where the price and the transaction volume are lower. This is the new market equilibrium in the but-for world.

39. In economic theory, the net benefit to each consumer purchasing a given product is the difference between the willingness-to-pay and the price paid. Aggregated across all

consumers in a market, the net benefit to all consumers is defined as consumer welfare. It is equal to the area under the demand curve and above the price line (red area and dark orange area in Figure 5). If the claim about the product is known to be false at the point of purchase, the demand curve will shift downwards (dark grey line in Figure 5). The new consumer welfare after the shift in the demand curve due to the false claim is equal to the area under the new demand curve and above the new price line (light orange area in Figure 5).

Figure 5: Consumer Welfare for Product With and Without a False/Misleading Claim



Source: Own analysis based on hypothetical data

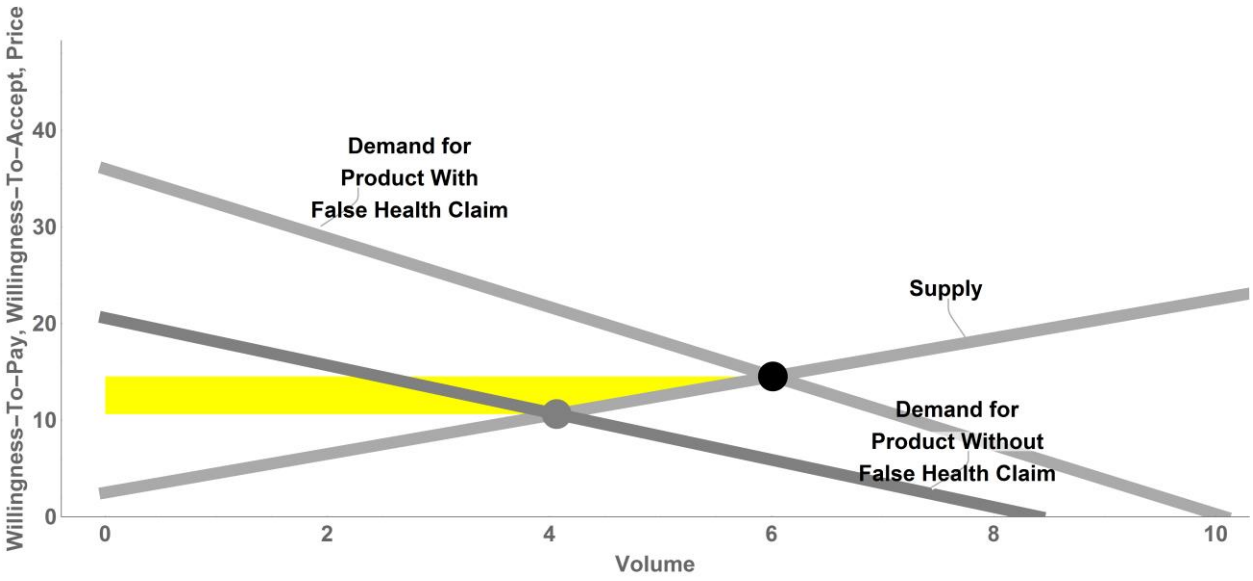
40. Since the demand curve for the product with the known-to-be-false claim is below the demand curve for the product absent a false claim, the consumer welfare for the product with the known-to-be-false claim is generally smaller than the consumer welfare of the product absent a false claim. Therefore, the consumers will have suffered economic losses.

41. Another way of looking at the economic loss to the consumer focuses on the manufacturer. Generally, a manufacturer's welfare is the difference between the willingness-to-accept and the price obtained in the market. Aggregated over all manufacturers, the manufacturers' welfare is the area below the price line and above the supply curve.

42. Corresponding to the consumers' welfare, we can also derive the manufacturer's welfare or gross profit. For each unit, the manufacturer's welfare is the difference between the price

received and the marginal costs of producing the unit. A shift in the demand curve results in a change in the manufacturer's welfare. In Figure 6 below, the difference in manufacturers' welfare between the product with the false claim and the product without the false claim is depicted by the yellow area. Recall that in the equilibrium between supply and the demand for the product with the claim was that six consumers would have paid $15 (see Figure 3). In the market equilibrium depicted in Figure 6, for the product with the false claim, four consumers would have paid $11 instead of $15 when the claim was known to be false at the point of purchase. In addition, two consumers who purchased the product would not have purchased the product with the false claim in the new market equilibrium. The yellow area in Figure 6 depicts the additional manufacturers' welfare obtained by not disclosing that the claim was false. Therefore, the manufacturer gains at the cost of the consumer.

Figure 6: Difference in the Manufacturers' Welfare between Producing the Product with and Without the False/Misleading Claim



Source: Own analysis based on hypothetical data

3.3 A Model of Economic Loss

43. Figure 6 shows how the false or misleading advertising increases the manufacturer's gross profits at the expense of consumers. The excess profit due to the false or misleading advertising would be considered restitution to the plaintiff in a legal framework that is built on profit disgorgement (e.g., in a dispute involving intellectual property). However, in this

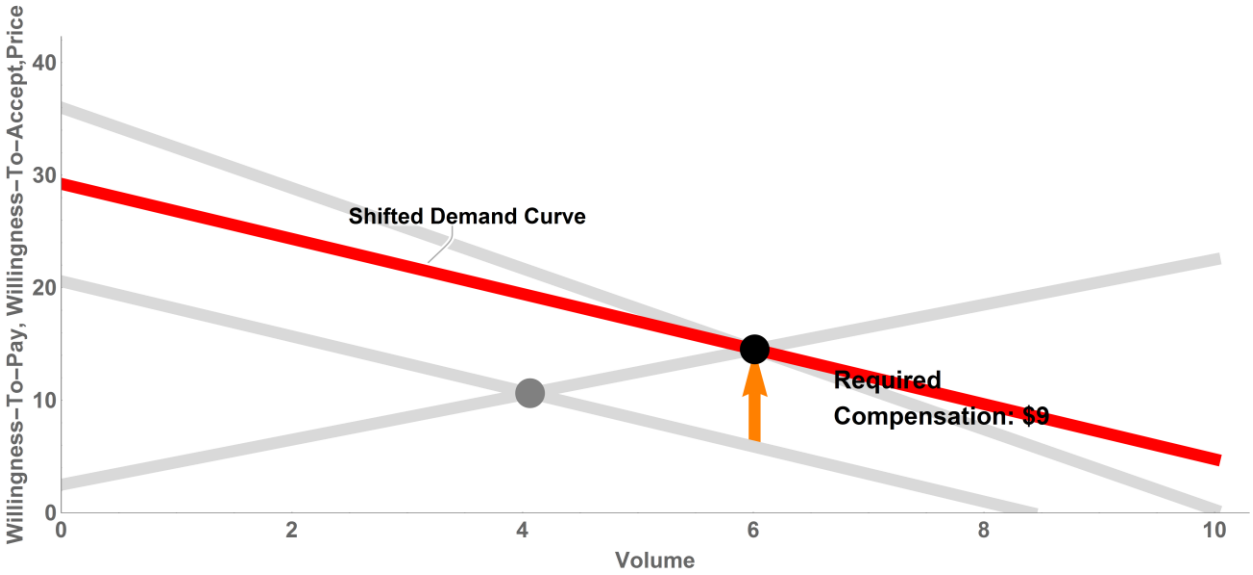
case, profit disgorgement would not compensate consumers for their economic loss. Instead, the proper economic loss methodology in this case has to be based on the loss in utility and the associated shift in demand of the affected consumers.

44. To make consumers whole for the economic losses, every consumer would have to receive an additional payment. The payment has to be sufficiently large to vertically shift the demand curve such that the demand curve for the product with the known-to-be-false claim plus the additional compensation intersected with the supply curve in the equilibrium for the product if the claim were true.

45. To determine how much the demand curve would have to be shifted, we need to focus on the marginal consumer in the market for the product without the false claim and compare the price she had paid to the price she would have paid for the product with the known-to-be-false claim at the point of purchase.

46. The compensation to make the marginal consumer whole after purchasing the product with the false claim is not simply the difference between the equilibrium prices on the demand curve for the product without the false claim and the demand curve for the product with the known-to-be-false claim (Figure 7). Rather, the compensation of the marginal consumer needs to be equal to the difference between the price this marginal consumer would have paid for the product with the known-to-be-false claim and the product without the false claim.

Figure 7: Compensation Required to Make Consumers Whole After Purchasing Product with False/Misleading Claim



Source: Own analysis based on hypothetical data

47. In the example illustrated in Figure 7 above, the marginal consumer paid $15 for the product before becoming aware of the false claim, but would have paid only $6 for the product with the false claim. The difference in willingness-to-pay is $9 ($15 minus $6).

48. The correct way to measure the economic loss to the class members considers that the downward shift in the demand curve is comprised of two components: a) a drop in units sold as measured on the horizontal axis, and b) a drop in the price paid by customers who are still buying the product even after receiving the information that the product does not have the features as advertised.

49. In the illustrative example in Figure 7 above, the new market equilibrium occurs at a lower price ($9 instead of $15) and at a lower number of units sold (4 instead of 6). Each buyer of the defective product has to be made whole because they overpaid for the product. The price that makes everyone whole is the price at which all 6 original buyers of the product would buy the product again. In the illustrative example in Figure 7 above, this price can be found by moving down the shifted demand curve to find the price at which the original number of buyers would purchase the product again. In the illustrative example above, this price is $6.

50. All else equal and depending on the shape of the supply curve and the demand curve before and after the disclosure of the information about the allegedly misleading claim at the point of purchase, the economic loss will differ.

3.4 Consideration of the Supply Side in the Economic Damages Model

51. The supply curve in the damages model is identical for the actual world (no disclosure) and the but-for world (the same infant formula product is now offered with full disclosure of the false and misleading claims by the salesperson at the point of purchase). The units of the product that were sold with the false claim are identical. Therefore, the shift in the attribute level has no impact on the marginal costs of the supplier and therefore the supply curve. Consequently, only the changes in the demand curve are relevant for the damage assessment.

52. Because the infant formula products supplied in the actual world and the but-for world are identical and the marginal costs in the actual and the but-for world do not change, the only relevant question is if the additional information of the disclosure (e.g., that the claim that the product can reduce the risk of developing allergies is deceptive and/or misleading) at the point of purchase makes the Gerber Good Start products actually sold inferior to the Gerber Good Start products as advertised in the eyes of the consumer. If the consumer perception changes such that the Gerber Good Start product that is not as advertised is viewed as inferior, the demand curve will shift downwards. This implies that for an upward sloped supply curve for the product, the downward shift of the demand curve is associated with a drop in the equilibrium price.

3.5 Approaches to Estimating the Value of Individual Attributes in Composite Products

53. In general, there are two different types of approaches to estimate the values of the individual characteristics, parts, and features that together form a composite product when there is no direct market for the individual characteristics, parts, and features (also known as attributes; price is also considered an attribute of a product) themselves:

a. Revealed Preference based, and

b. Stated Preference based.

54. Revealed Preference based approaches observe actual purchases by consumers or published prices and infer from that information the decomposition of the overall price of the composite product into its constituent attributes. This is most often accomplished by using hedonic pricing models where the actual transaction prices of the composite product with varying attributes is regressed on the specifications of the composite product. The regression coefficients are then interpreted as the implicit market prices of each attribute.

55. Stated Preference based approaches involve asking individuals directly or indirectly how much they value a particular product. This is done by investigating how much they would be willing to pay for a particular attribute/feature in a composite product. In this context, Conjoint Analysis is an approach exploring respondents' preferences over multiple sets of choices, which produces rich data sets and numerous data points from which to estimate the value of the attribute/feature of interest. Conjoint Analysis is conducted in a survey setting where demographic, socio-economic, and general decision-making processes and preference information about the product in question collected and integrated into the estimation process. The particular strength of Conjoint Analysis is the fact that the stated preferences are derived from indirect questions, thereby avoiding the pitfalls of strategic responses in direct questioning.

56. In my opinion, Conjoint Analysis is an appropriate approach in this case to estimate the values of the individual attributes and features in question to assess the extent to which the allegedly false claims at issue (including that Gerber Good Start reduces the risk of developing allergies), resulted in a loss of utility to the consumers, and thus created economic losses to the members of the proposed class.

4 Methodology of the Empirical Study

4.1 Conjoint Analysis – Methodology

57. Conjoint analysis enjoys wide use in market research and is discussed in depth in the market research literature.[12] Over 14,000 commercial applications of Conjoint Analysis are estimated

[12] *See*, for example: Rao, Vithala, Applied Conjoint Analysis, Springer-Verlag, 2014.

to take place each year.[13] Vithala Rao's book, *Applied Conjoint Analysis*, gives numerous examples of the widespread use of Conjoint Analysis including, but not limited to, several high-profile applications by large corporations and large public agencies such as (i) Microsoft for pricing newly released software products, (ii) Proctor & Gamble for consumer-goods pricing and new product development, (iii) Marriott Corporation for the development of the Courtyard hotel brand, and (iv) T-Mobile for developing optimal cellular plans. Conjoint Analysis was also integral to the development of the EZPass electronic toll collection system by regional transit agencies in New York and New Jersey in the 1990s.[14]

58. The general idea behind Conjoint Analysis is that consumers' preferences for a particular product are driven by features or descriptions of features embodied in that product. Conjoint Analysis is a set of econometric and statistical techniques that have been developed to study consumers' decision-making processes, determining trade-offs between products, features, and price, as well as quantifying consumers' gains and/or losses of utility when choosing between different alternatives. By simulating real world and/or hypothetical choices between product features and prices under different levels of information, Conjoint Analysis is ideally suited to model the impact of different choice scenarios on a consumer's utility function.

59. The data required for a Conjoint Analysis are collected in the setting of a survey where survey participants are shown product profiles with different levels of each attribute. The survey participants are consumers who currently are or recently have been in the market for the product of interest – in this case, infant formula products. After reviewing a set of choice menus of product attributes and their levels, survey participants are then asked to indicate their preferences for those profiles. The product profiles include choice options for different price points for each set of features on the choice menu.

60. After the completion of the survey, the Conjoint Analysis uses data from the survey on the attribute levels of the product profiles shown, and the resulting preferences or choices of respondents, to decompose the respondents' preferences for a product into the partial contribution of these attribute levels ("part-worths") to overall product utility using

[13] Orme, Bryan K, Getting Started with Conjoint Analysis: Strategies for Pricing Research, 2nd ed., Madison: Research Publishers, 2005.
[14] Rao, Vithala, Applied Conjoint Analysis, Springer-Verlag, 2014, Chapters 6.4 and 6.5.

appropriate statistical methods. The statistical models used in my analysis – Mixed Logit Models and Hierarchical Bayesian Estimation – will be discussed in more detail in Section 6 "Economic Loss Model." These statistical estimation techniques quantify the part-worths for feature levels such that the resulting estimated part-worths best predict respondents' preferences or choices from the survey.

61. The price reduction needed to compensate for the loss of a feature, or the additional price customers would pay for the inclusion of a feature can then be calculated and a variety of choice situations and trade-offs between choices can be modeled and their outcomes can be precisely quantified. The precision, and thus the reliability, of the resulting estimations depends on the number of survey participants. The more respondents take part in the survey, the more precise the resulting predictions are.

62. For this assignment, I can apply a form of Conjoint Analysis known as Choice-Based Conjoint Analysis ("CBC"). In CBC, study participants are shown sets of product profiles (called "choice sets" or "choice menus"), and are asked to choose the profile that they would prefer to purchase if the choice menu offered would describe the only products that were available to them. CBC survey methods closely mimic real-world purchase processes.[15] Conjoint Analysis allows for the prediction of the probability that a respondent will choose any product profile that is described by the part-worths and can do so for any competitive set of products.[16] Based on the estimations, it is also possible to simulate how choice shares would change in a market based on a change in overall price. CBC enables us to determine the difference in value (measured in dollars) that customers place on an infant formula product that claims—for example—it "reduces the risk of developing allergies" compared to an otherwise identical infant formula product that does not make this claim.

[15] Orme, Bryan K, Getting Started with Conjoint Analysis: Strategies for Pricing Research, 2nd ed., Madison: Research Publishers, 2005.
[16] Allenby, Greg M & Peter E Rossi, "Hierarchical Bayes Models," in Grover, Rajiv & Marco Vriens, eds., The Handbook of Marketing Research, Thousand Oaks: Sage Publications, Inc., 2006.

4.2 Statistical Estimation Techniques Applied in Conjoint Analysis

63. The underlying econometric and statistical estimation techniques of the Conjoint Analysis are based on Mixed Logit models and Hierarchical Bayesian Estimation techniques, which are widely employed in economics and marketing research to analyze preferences over a discrete set of choices.[17]

64. Mixed Logit models use the idea that each consumer assigns a utility to each choice, and this utility measures the attractiveness of each choice. These utility values are correlated with the attributes of the actual choice (for example, adding an indicator that a product is organic to an otherwise identical infant formula product or including the claim that the product reduces the risk of developing allergies to an otherwise identical infant formula product where it is known to the consumer that the claim is not true) and the price associated with that choice. The utilities are also correlated with observable characteristics of the consumers making the choice (such as their age or income).

65. The utility of each product consists of two components – a deterministic component and a random component. The deterministic component can be modeled by observable factors such as socio-economic and demographic characteristics of the consumers, product features, and market conditions. In general terms, the random component summarizes all the unobservable factors in the individual consumer's choice process. In Mixed Logit models, the random component is expressed through a logistic distribution function. Together with the observable factors, this distribution function is used to predict the probability that a particular choice is made.[18]

66. Once shown a menu of choices of different levels of attributes and different price alternatives, the consumer then chooses the one choice in the menu that yields the highest utility from that

[17] Underlying the Mixed Logit is a model of random utility. Berkeley economics professor Daniel McFadden developed the random utility model in the 1970s while working as a consultant on the design of the Bay Area Rapid Transit (BART) system in California. This work won McFadden the Nobel Prize in 2000. *See* Hal Varian, Intermediate Microeconomics, 8th Ed, 2009, Page. 68.

[18] *See*, for example: Rao, Vithala, Applied Conjoint Analysis, Springer-Verlag, 2014, Chapter 4, for a detailed discussion of the use of mixed multinomial logit models in choice based conjoint studies.

menu of choices.[19] Observing consumers' choices from various choice menus enables one to estimate the relative value consumers place on one attribute over another.

67. Price is included as an attribute, which allows for the estimation of the value of an attribute relative to price – that is, the dollar value of the willingness-to-pay for that attribute. In fact, the willingness-to-pay for an attribute is the negative ratio of the attribute's coefficient to the price coefficient in the underlying choice model.[20]

68. Bayesian statistics is a subset of statistics where the underlying model parameters are assumed to be random variables rather than fixed quantities. Bayesian modelling is based on assigning prior probability distributions to any unknown parameters. In this case, the unknown parameters to be estimated are the part-worths of the attributes of a composite product derived from the choice sets in the conjoint analysis. These parameters are estimated by a technique referred to in the literature as Hierarchical Bayesian Estimation.[21]

69. In Hierarchical Bayes Estimation ("HBE"), the parameter estimates are derived in a two-step hierarchical approach. At the higher level, the individual consumers' part-worths are assumed to follow a specified distribution (like multivariate normal distribution or log-normal distribution). At the lower level, it is assumed that the individual consumers' choice probabilities can be described by a model, such as a Mixed Logit model. Initial estimates of part-worth are estimated for each study respondent to use as a starting point. New estimates are updated using an iterative process called "Gibbs Sampling" and "Metropolis Hastings Algorithms."[22] This process is typically repeated thousands of times whereby in each iteration, an estimate is made for each parameter, conditional on current estimates of the others. After many iterations, this process converges to the correct estimates for each of the parameters.

[19] *See* Figure 8 for an example of what a choice menu might look like where a respondent is presented a menu with four choices of combinations of features and the choice of "no purchase."
[20] Train, Kenneth E., "Discrete Choice Methods with Simulations," Cambridge University Press; 2nd edition, 2009. Chapter 12 gives a detailed derivation of the Bayesian approach applied in this report.
[21] *See*, for example: Rao, Vithala, Applied Conjoint Analysis, Springer-Verlag, 2014, Chapter 4.11, for a detailed discussion of the use of Hierarchical Bayesian Estimation in choice based conjoint studies.
[22] Rao, Vithala, Applied Conjoint Analysis, Springer-Verlag, 2014, Page. 168.

70. The HBE method combines random effect specifications at the aggregate level to account for variation across individuals and specific modelling of choice probabilities at the individual level. With market simulations, the performance of competing alternatives can be evaluated.

5 Empirical Study

71. The empirical study can be conducted as a consumer survey, including a pre-test/pilot study, and a Choice Based Conjoint ("CBC") study. In this section, I first discuss in general terms consumer survey methodology and then continue to describe the components of the empirical study and how they would be implemented.

72. To conduct the empirical study, I will commission a survey vendor to program and host the questionnaires of my design to analyze the preferences and choices of consumers who have purchased infant formula products within a set time period.

73. The survey vendor specializes in internet panel surveys. In my experience, internet-based surveys can provide reliable results and can have some advantages over other recruiting methodologies. Over the last decade, internet surveys have increasingly gained popularity and acceptance, including in litigation.

74. Current research suggests that the increased use of internet surveys has great advantages over other traditional methods. For instance, studies have found that computer data collection yields higher concurrent validity, with less chances of participants framing answers to attempt to please the questioner, and less random measurement error when compared to mall intercept studies and telephone surveys. Internet surveys also allow for broad geographic reach to areas where surveying via mall intercept or other face-to-face methods would not be feasible.[23] Well-executed internet survey research is regularly accepted by courts.[24]

[23] *See* "Reference Guide on Survey Research," S.S. Diamond, *Reference Manual on Scientific Evidence*, Third Edition, Federal Judicial Center, 2011, Page 401. Additionally, online surveys have advantages in terms of efficiency and cost.

[24] "Why Online Surveys Can Be a Smart Choice in Intellectual Property Litigation," B. Isaacson et al., *IPL Newsletter* (ABA Section of Intellectual Property Law) Vol. 26, No. 3, 2008.

75. Moreover, internet surveys have become a fixture in the corporate world. According to the Global Research Business Network, internet surveys now account for more than a quarter of global market and social research revenues. In many of the world's top research markets, internet surveys are now the primary means of research.[25]

76. The efficacy of internet studies is often furthered by survey market research firms that operate large internet panels. These firms employ trained professionals who program, administer, and quality control the surveys to increase the quality of the results.

77. A frequent point of criticism of internet surveys is the fact that they typically do not conform with the requirement for statistical random samples which states that for every individual in the target population, the selection probability must be a known number greater than zero and, therefore, no inference can be drawn about the precision and/or margin of error of the study.

78. However, advanced statistical methods can be applied to compute model-based confidence intervals for well-designed and well-balanced non-probability samples. In 2016, the American Association of Public Opinion Research ("AAPOR") issued a guidance paper on "Reporting Precision for Nonprobability Samples"[26] which details approaches and reporting guidelines when precision calculations are performed for non-probability samples.

79. In summary, properly designed and well-executed internet surveys have increasingly gained acceptance and can be used to draw valid statistical inferences about the target population.

80. As described above, the empirical study includes a CBC module which is designed to quantify the value that consumers assign to common infant formula attributes/features. The survey vendor will administer the survey and the empirical study via an online panel. The survey vendor will follow accepted standards regarding:

a. Survey panelist recruiting;
b. Strategic partnerships with other market research firms;
c. Use of advanced software and technology;

[25] http://fortune.com/2015/09/16/online-survey-companies-law-firms/.
[26] AAPOR Guidance on Reporting Precision for Nonprobability Samples - https://www.aapor.org/getattachment/Education-Resources/For-Researchers/AAPOR_Guidance_Nonprob_Precision_042216.pdf.aspx.

d. Use of proprietary survey completion time tracker;
e. High quality filtering system to track respondent information and respondent behavior to deliver the highest quality sample;
f. Best practices of quality control - including removal of sign-ups who provide inconsistent demographic information, GeoIP lookups at time of registration and, most importantly, periodic use of mailed survey awards for U.S. panelists to verify street addresses;
g. Data tabulation and recording; and,
h. Survey participation validation.

81. As is standard practice for surveys used in litigation proceedings, the surveys are conducted in a "double-blind" fashion[27] – that is, neither the staff at the survey vendor nor the respondents are aware of the survey sponsor or the ultimate intention of the survey. Additionally, the data collection and initial tabulation are automated and concurrent with answering the online questionnaire.

82. To ensure that the data generated by the survey are of the highest quality, the survey vendor will implement additional quality control measures:

a. Respondents are required to enter their gender and age at the outset of the survey. If these data conflict with the respondent information on file with the survey vendor, the respondent is excluded.
b. Respondents who indicate that they do not understand or are unwilling to adhere to the survey instructions are also screened out of the survey.
c. The survey vendor sends an individual link to the online survey by email. This link contains an embedded identification number to ensure that only invited respondents can answer the survey and that each respondent can only complete the survey once, and that only one member per household can complete the survey.
d. The survey also includes a control measure to evaluate the extent to which

[27] Diamond, Shari, S. (2012) "Reference Guide on Survey Research," *Reference Manual on Scientific Evidence,* Committee on the Development of the Third Edition of the Reference Manual on Scientific Evidence; Federal Judicial Center; National Research Council, Pages 410-411.

respondents were involved in completing the survey. As a control, the survey vendor relies on survey administration measures, which include review of each respondent's survey completion time, review of text field responses, straight-line testing, and other filtering techniques that filter automated responses and result in superior data as well as higher quality feedback.

5.4 Pre-Test Study

83. The first component of my empirical study is a Pre-Test Study, which is a 'small' scale version or trial run done in preparation for the major study.[28,29] One of the many benefits of administering a pre-test study is that it might give important insights of what might happen in the main study. It may also be a reliable mechanism to narrow down the list of attributes.

84. In this context, "attributes" refers to characteristics of the infant formula products (such as formulation, class, nutrition information, health benefits, price, etc.). Each attribute has at least two levels – where level refers to the values that an attribute can take – e.g., the attribute "formulation" could have three levels (powder, liquid, ready-to-feed) while the attribute price could have six levels, which means that there are six different prices in the conjoint study.

85. Survey research literature gives the following reasons for conducting pilot studies:[30]

a. Developing and testing adequacy of research instruments,
b. Assessing the feasibility of a (full scale) study,
c. Establishing whether the sampling frame and techniques are effective,
d. Identifying logistical problems which might occur using proposed methods,
e. Estimating variability in outcomes to help determine sample size, and
f. Collecting preliminary data.

[28] Polit, D.F., Beck, C.T., Hungler, B.P. (2001) Essentials of Nursing Research: Methods, Appraisal, and Utilisation (5th ed.). Philadelphia: Lippincott.
[29] Baker, T. L. (1994), Doing Social Research (2nd ed.), New York: McGraw Hill Inc.
[30] De Vaus, D.A. (1993), Surveys in Social Research (3rd ed.), London: UCL Press.

86. As part of the Pre-Test Study, approximately 400 respondents will complete a survey in which they are asked about the importance of product features of infant formula products. Respondents will only be included in the survey if they meet the following criteria:

a. Respondent is 18 years or older;
b. Respondent resides in the United States;
c. Respondent has purchased an infant formula product in the past six years;
d. Respondent is not working in market research.

5.5 Choice Based Conjoint Study

87. The second component of my empirical study is comprised of the Choice Based Conjoint analysis based on a survey of 2,000 consumers. I will divide the 2,000 respondents into a test group of approximately 1,400 purchasers of Gerber Good Start products and a control group of approximately 600 purchasers of products from competing brands like Enfamil and Similac.

88. Using the survey vendor's access to large online consumer panels, I am able to target a demographically diverse group of respondents who have been recent purchasers of Gerber and competing brands. When recruiting survey participants, the survey vendor will employ a method of balancing the survey participants based on demographics and socio-economic factors such as gender, age, income, and geographical region.

89. The survey vendor will apply the same filter criteria as in the Pre-Test Study. Respondents will only be included in the survey if they meet the following criteria:

a. Respondent is 18 years or older;
b. Respondent resides in the United States;
c. Respondent has purchased an infant formula product in the past six years;
d. Respondent is not working in market research.

90. The survey vendor will be able to replicate the demographics of the Pre-Test Survey with respect to gender, age, income, and geographical region.

91. After qualifying for the survey, the participants will respond to questions designed to elicit their thoughts about infant formula products. Further, they will be asked which brand they bought most recently, and which attributes are important to them when making purchasing decisions (e.g., price, brand, etc.).

92. Neither the respondents nor the survey vendor will have any information on the context of the study or who commissioned it, and they will not be informed that the data will be used in litigation, or more specifically, in a lawsuit against Gerber.

93. The next section of the survey will be comprised of the actual CBC exercise itself. During this exercise, respondents will view a discrete number of choice sets, each containing a combination of discrete number of attributes, plus a price. Below is an example of potential attributes and their respective levels:

a. Formulation – the levels for this attribute are:
    i. Powder
    ii. Liquid
    iii. Ready-to-feed
b. Class – the levels for this attribute are:
    i. Cow-milk based
    ii. Soy-based
    iii. Specialized
c. Claim regarding reduction in the risk of developing allergies – the levels for this attribute are:
    i. Reduces the risk of developing allergies
    ii. No such claim is made
d. Organic – the levels for this attribute are:
    i. Organic
    ii. Not organic
e. Price – the levels for this attribute are:
    i. $14.00
    ii. $19.25
    iii. $24.50

iv. $30.00

v. $34.75

vi. $40.00

94. Three considerations determined the boundary of this price range:

a. Generally, the price range should cover realistic prices for the product. For example, a price of $1 would not be realistic as the typical retail price is far higher. Similarly, a price of $1,000 would also not be realistic.

b. Prices can be higher or lower than the prices of currently offered products as we test product attribute combinations that might not yet be available in the market.

c. In the case that we test the impact of false and misleading advertising, we determine the price for a product without the advertised claim, which is currently not available in the market. Hence, in order to estimate a demand curve for the product without the advertised claim, we need to include prices both below and above the price points common in the market.

In my opinion, the price range from $14 to $40 complies with these considerations.

95. The CBC employed in the survey will randomly assign choices from all possible choices[31] with equal likelihood and with uniform frequency of each level of each attribute and each pair of attribute/level permutations. That is, the CBC design is *balanced* and *orthogonal*. Balanced and orthogonal surveys are commonly employed in CBC.[32] The importance of an orthogonal and balanced design lies in the fact that designs of this type are 100% efficient. Efficiency implies that the resulting estimations have the smallest mean squared error out of all possible designs.[33] The mean squared error measures the level of variation and, as such, the precision of the resulting estimates. The smaller the mean squared error of an estimate the more precise

[31] There are 3 levels for the formulation attribute, 3 levels for the class attribute, 2 levels for the allergy claim attribute, 2 levels for the organic attribute, and 6 levels for the price. This yields 3×3×2×2×6 (or 216) different possibilities of combining the different levels of the attributes in the study.

[32] Bakken, David & Curtis L Frazier, "Conjoint Analysis: Understanding Consumer Decision Making," in Grover, Rajiv & Marco Vriens, eds., The Handbook of Marketing Research, Thousand Oaks: Sage Publications, Inc., 2006, Chapter 15.

[33] The mean squared error (MSE) is calculated as the average of the squared distances between the estimator and what is estimated, or the "errors." Efficient designs are ones that minimize the MSE.

it is. As such, efficiency of a design is a measure of the information content of a design. Therefore, more efficient designs imply more reliable results.[34]

96. Each choice set will consist of five choices: four with various combinations of product attributes and prices as described above and a fifth "opt-out" choice, indicating dissatisfaction with each of the first four choices.[35] After each survey choice, respondents will be asked to whether they would have purchased the selected product or not. The following Figure 8 and Figure 9 below show examples of choice menus with two different ways of incorporating the no-purchase option.[36] Each participant will respond to 12 such screens. Each screen shows randomly selected levels for each attribute. Therefore, Figure 8 does not necessarily show all levels for each attribute.

Figure 8: Example of a CBC Choice Menu

Please indicate which of the options you would select.

	Option 1	Option 2	Option 3	Option 4	Option 5
Formulation	Powder	Liquid	Powder	Ready-to-Feed	None of these. I would shop somewhere else for better options.
Class	Milk-based	Soy-based	Specialized	Soy-based	
Health Claim	Reduces the risk of developing allergies	-	-	Reduces the risk of developing allergies	
Organic	No	Yes	Yes	No	
Price	$24.50	$14.00	$19.25	$34.75	
Which option would you prefer?	○	○	○	○	○

[34] The standard error is the standard deviation of the sampling distribution of a statistic. A smaller standard error implies a smaller margin of error, which results in a tighter confidence interval around an estimate.
[35] See Orme (2005) for an exposition of the advantages of including the opt-out option.
[36] Each of the 2,000 participants in the CBC will respond to 12 screens with five choices yielding a total of 2,000×12×5=120,000 data points for the statistical analysis.

Figure 9: Example of a CBC Choice Menu

Please indicate which of the options you would select.

	Option 1	Option 2	Option 3	Option 4
Formulation	Powder	Liquid	Powder	Ready-to-Feed
Class	Milk-based	Soy-based	Specialized	Soy-based
Health Claim	Reduces the risk of developing allergies	-	-	Reduces the risk of developing allergies
Organic	No	Yes	Yes	No
Price	$24.50	$14.00	$19.25	$34.75
Which option would you prefer?	○	○	○	○

Would you purchase this option? ○ Yes ○ No

97. It is a known phenomenon that choices presented earlier in a list of choices in a questionnaire are disproportionately likely to be selected.[37] This phenomenon is known as order bias. To avoid order bias in my study, attributes will be shown in a different order, chosen at random, to each respondent – except for price, which is always shown last.

6 Economic Loss Calculation

6.1 Four-Step Estimation Process

98. A purchaser of a Gerber Good Start product that contains a claim that it reduces the risk of developing allergies (for example), a claim which is alleged to be false, actually paid for the product expecting to receive a product where the advertised claim was true but in fact received an inferior product. As described above, I will design a choice based conjoint study to assess if giving the consumer the information at the point of purchase that the claim of reducing the risk of developing allergies is false will lead to a downward shift of the demand curve.

[37] Krosnick, Jon and Duane Alwin, "An evaluation of a cognitive theory of response order effects in survey measurement," Oxford Journals Social Sciences Public Opinion Quarterly Volume 51, Issue 2, Pages. 201-219.

99. I will apply the following four-step estimation process to determine the economic loss associated with purchasing a product where the claim made turns out to be false:

a. Step 1: Based on the results from the CBC analysis, compute individual utilities for each respondent for each attribute and each level in the study.
b. Step 2: Construct the demand curves for the product in the actual world and the but-for world.
c. Step 3: Quantify the drop in consumer demand and the corresponding economic loss that the purchasers experienced because they were unaware at the point of purchase that the claim is false.
d. Step 4: Conduct market simulations to assess the drop in demand for a large variety of product combinations.

100. In Step 1, I utilize a software program called Sawtooth to compute utilities for the attributes and the levels for each attribute in the study. The Sawtooth software applies the Hierarchical Bayesian Estimation technique explained above to compute individual utilities for each respondent and aggregate utilities for all levels and attributes in the study. The Sawtooth software allows the researcher to specify the models in different ways. One important feature is a constraint that specifies the model in a fashion that higher prices are always associated with a lower utility.

101. This so-called monotonicity constraint refers to a property of the utility estimates. Without the monotonicity constraint, the utility estimates may yield higher numerical values for levels that seem to be lower in utility for some individuals, and thus seemingly indicate "illogical" consumer choices.

102. However, this behavior can be explained by the fact that the "rational economic consumer" is only a postulate or an assumption in theoretical economics while in the "real" world not all variables affecting consumer choices can be measured, and as a consequence, consumers often do exhibit seemingly irrational behavior. For example, I may stop at a gas station that charges $0.20 more per gallon because I am already running late on my way to work and this particular gas station is the one I can get to easily without detour. While it may seem irrational to pay more for gas, the convenience factor in this example cannot be measured and quantified.

103. The Sawtooth software allows the researcher to "smoothen" the utility estimates in a way that higher price levels for a specific attribute combination are always associated with a lower utility value. This feature ensures that "illogical" consumer choices are ruled out when a monotonicity constraint is built into the model. When using a monotonicity constraint, the demand curves are smoother, and therefore, the resulting market simulations have fewer extreme data points making the damages estimates on average lower.

104. In Step 2, the utility estimates are applied to construct the demand curve for the product when the advertised claim is believed to be true by the consumer at the point of purchase. Further, I construct the demand curves for the other levels for an attribute of interest.

105. In Step 3, I quantify the drop in consumer demand and the new equilibrium price. Based on the degree of the downward shift of the demand curve, I can then calculate economic damages to the members of the putative class based on their purchase of the product with the false claim.

106. In Step 4, I conduct market simulations to assess if economic damages exist in a wide variety of market conditions.

6.2 Market Simulations in Conjoint Analyses

107. To assess the robustness of the willingness-to-pay estimation under a variety of market conditions, I perform a comprehensive market simulation study using the individual utilities that I have estimated from the conjoint study using the Hierarchical Bayesian Estimation methodology. In my market simulations, I use the attributes and levels defined in the conjoint study.

108. The Hierarchical Bayesian Estimation of the parameters of the underlying Mixed Logit choice model yields estimates of individual part-worth utilities for each respondent for each level of all attributes in the conjoint study.

109. Market simulations are an important tool to convert the part-worths from the conjoint study into monetary measures reflecting consumer preferences and choices. In general, different permutations of product attributes and levels of those product attributes are applied in a market

simulation to assess the respondents' choice probabilities for different combinations of product attributes and the resulting economic loss.

110. In general, conjoint studies lead to a set of utilities or part-worths that quantify respondents' preferences for each level of each attribute. These utilities can be analyzed to assess how the respondents react to changes in the product attributes at different price points.

111. The market simulation consolidates the preferences and choices for all respondents which enables us to answer questions about preference and likelihood of choice when attributes and levels of product attributes are changed.

112. By using the individual part-worths, it is possible to determine the demand curve for any specific combination of product attributes and their levels for different price points. When the question needs to be answered if and how the change in the level of a particular attribute changes the demand curve then two demand curves can be calculated – the first one for a specific set of levels and attributes and a given price and the second one where the product attributes and price are identical but one level of one attribute is different. The measured shift in the demand curve, if any, can then be attributed to the changed level. Based on the change in demand curves, if any was found, it is then possible to determine the change in price that would be necessary to reach the same demand for the product where a level in one of the attributes was changed.

6.3 Quantification of Economic Loss Based on Conjoint Analysis Supported by Market Simulations

113. The estimated willingness-to-pay using this method is derived from the utility that respondents gain from purchasing a Gerber Good Start product that (for example) claims to reduce the risk of developing allergies compared to obtaining an otherwise identical Gerber Good Start product that does not make that claim. To be clear, this value is *not* an average value that would be different for all class members – rather, it is the equilibrium price calculated based on consumers' responses to varying choice menus in the Conjoint Analysis designed to derive one numerical figure to value the claim. The interpretation of this figure is the amount consumers paid when purchasing a Gerber Good Start product making a particular claim compared to an otherwise identical Gerber Good Start product without such a claim.

114. The conjoint analysis allows the researcher to estimate a demand curve for a specific combination of attributes. Based on the monotonic property of the price utilities, interpolation between the price-market share combinations allows the researcher to estimate the demand curve for market shares from 0 to 100 and every price between a discrete range. A change in the level of one or more of the attributes would result in a different demand curve.

115. Ceteris paribus, when we assume the but-for world where the consumer is told about the falsity of a particular claim, the levels of the attributes change, and the Gerber Good Start product becomes less attractive to consumers and the demand curve shifts downward.

116. In economic theory, a negative price is associated with bads – the opposite of goods.[38] In simple terms, the consumption of a bad is associated with negative utility for the consumer, which will be reflected in the consumer's willingness-to-pay. A simple example will illustrate the concept of an economic bad in context of price and willingness to pay: Let's assume that a vendor operates a stand at mile marker 13 during a marathon race where she sells bottles of water for $5 and that this vendor is the only one selling water bottles at mile marker 13. The bottles of water at the price of $5 constitute the supply of water bottles at that particular location. All runners who at that moment in time would assign a subjective value greater than or equal to $5 to the bottle of water will become purchasers while all runners who at that moment in time would assign a subjective value smaller than $5 to the bottle of water will not purchase the bottle of water. Therefore, the subjective value itself does not matter and does not need to be measured accurately. The fact that one runner may assign a subjective value of $100 is completely irrelevant because this runner will pay the asking price of $5.

117. Let's now assume that the bottles sold by the vendor really contain clear vinegar and the vendor would tell the runners that the label on the bottle indicating that it is water in the bottles is wrong because the bottles really contain vinegar. It can safely be assumed that in the situation of a marathon race vinegar is a less desirable liquid and the demand curve for vinegar would be downward shifted from the demand curve for water.

[38] Hal R. Varian, Intermediate Microeconomics, 8th Edition, 2009, Page 41.

118. Every runner who paid $5 for the bottle labeled as "water" which actually contained vinegar suffered an economic loss. However, the loss is not calculated as the difference between the assigned subjective value of the water bottle and the assigned subjective value of the bottle filled with vinegar. Much rather, the economic loss is the difference between the price paid (i.e., $5) for the bottle and the price that would have been paid for a bottle of vinegar in this situation.

119. While vinegar may be perceived as an economic good with a positive utility associated with its consumption, it is entirely possible that there would not be any demand for a bottle of vinegar during a marathon race and vinegar would turn from an economic good into an economic bad. Therefore, the true market value of a bottle of vinegar is irrelevant if the consumers have been led to believe that they are purchasing water.

120. In cases where consumers view a product as an economic bad (like a bottle of vinegar during a marathon race), the economic loss suffered can be equal to or larger than the purchase price. Therefore, the argument that large values for the economic loss would render the damages model unreliable is simply incorrect and unfounded. We all know the colloquial expression "You would have to pay me money to buy that" – this expression has a theoretical foundation in economic theory and a technique like choice based conjoint analysis can be utilized to quantify the economic loss.

121. As shown in theory in Figure 7, in order to make consumers whole after they had been harmed by false advertising, we need to shift the demand curve in the but-for world vertically into the actual demand curve.

122. The market simulation results will show the market share for a Gerber Good Start product that is advertised (for example) with the claim that it reduces the risk of developing allergies and sold at a set price in the actual world. The conjoint analysis will indicate whether the same Gerber Good Start product but without the claim would require a much lower price to achieve the same market share. If the conjoint analysis shows this, this result would clearly indicate that the removal of the attribute represented by the claim will have turned the product into a bad for the marginal consumer.

123. In my market simulations, I will have varied the levels of attributes and prices, resulting in a discrete number of possible combinations. For each attribute combination, I will compute two demand curves to assess if a drop in the demand curve results in an economic loss for a set of price points.

124. The consumption of a bad is undesirable and it creates negative utility for consumers. Therefore, more consumption as measured in higher market share of a product that is a bad will further decrease the negative utility and can thus increase the economic loss beyond the actual price of the product.

7 Summary and Conclusion

125. It is possible to develop a theoretical model that shows how the demand for a product changes when attributes and levels of attributes for that product change. To quantify the change in demand when the attributes of the product change (e.g., when claims about the product are false and misleading), it is possible to design a choice based conjoint study.

126. I will apply the well-established scientific methodology of Mixed Logit modeling and Hierarchical Bayesian Estimation to analyze the data from the efficiently designed choice based Conjoint Analysis. The results from the conjoint analysis can be relied upon to draw inferences about the value of claims to customers at the point of purchase and how such value will change when the claims are revealed to be false at the point of purchase.

127. The conjoint analysis shows what respondents would have paid for a product with none of the attributes falsely claimed. This value can be used to determine if consumers suffered an economic loss and, if so, to calculate the economic damages if the Court decides that the claim at issue was false and misleading.

128. Lastly, I conclude that the method proposed and described in this report can be used to expand the results of the conjoint study to a complete model to calculate class-wide damages in the merits phase of this case by multiplying the economic loss per unit as established above with the number of units purchased by class members during the class period. In addition, the model proposed in this declaration to compute class-wide economic losses can be expanded

in the merits phase of this case to incorporate additional aspects if the Court deems this necessary.

129. The analysis and opinions contained in this declaration are based on information available as of the date of this declaration. I reserve the right to supplement or amend this declaration in the event additional information becomes available.

130. I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct. Executed this 9th day of March, 2018, at Los Angeles, CA.

Stefan Boedeker

8 References

Allenby, G., & Rossi, P. (2006). Hierarchical Bayes models: a practitioners guide *The Handbook of Marketing Research* (pp. 607-670).

Bakken, D., & Frazier, C. L. (2006). Conjoint analysis: Understanding consumer decision making *The Handbook of Marketing Research* (pp. 607-670).

Diamond, S. S. (2011). *Reference guide on survey research* (3rd ed. Vol. 221).

Isaacson, B., Hibbard, J. D., & Swain, S. D. (2007). Why Online Consumer Surveys Can be a Smart Choice in Intellectual Property Cases. *IPL Newsl., 26*, 12.

Kuhfeld, W. F. (2006). Construction of efficient designs for discrete-choice-experiments *The handbook of marketing research, Uses, misuses, and future advances, Sage Publ., Thousand Oaks, Calif* (pp. 312-363).

Lancaster, K. J. (1966). A new approach to consumer theory. *Journal of political economy, 74*(2), 132-157.

Orme, B. K. (2005). *Getting started with conjoint analysis: strategies for product design and pricing research* (2nd ed.): Research Publishers.

Rao, V. R. (2014). *Applied conjoint analysis*: Springer Science & Business Media.

Train, K. E. (2009). *Discrete choice methods with simulation*: Cambridge university press.

Varian, H. R. (2010). *Intermediate Microeconomics: a Modern Approach* (8th ed.): WW Norton & Company New York.

Exhibit 1

STEFAN BOEDEKER

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Education

- BS in Statistics,
  University of Dortmund, Germany
- BA in Business Administration
  University of Dortmund, Germany
- MS in Statistics
  University of Dortmund, Germany
- MA in Economics
  University of California, San Diego
- Met Ph.D. requirements except dissertation in Economics,
  University of California, San Diego

Professional Associations

- Member of the American Economic Association (AEA)
- Member of the American Statistical Association (ASA)
- Member of the Econometric Society
- Member of the Mathematical Association of America (MAA)
- Member of the American Association for Public Opinion Research (AAPOR)
- Member of the Insights Association (FKA MRA)
- In 2001 Stefan was a member of an AICPA task force dealing with Corporate Integrity Agreements (CIA). Stefan was responsible for issues related to statistical methodology utilized in CIA's.

Background

Stefan is a Managing Director at Berkeley Research Group where he focuses on the application of economic, statistical, and financial models to a variety of areas such as solutions to business issues, complex litigation cases, and economic impact studies. He has extensive experience applying economic and statistical theories and methodologies to a wide variety of cases where But-for-scenarios have to be developed based on probabilistic methods and where statistical predictive modeling has to be applied to assess liability and damages.

Stefan has applied these techniques in business disputes, single-plaintiff cases, multi-plaintiff cases, and class action proceedings in the areas of class certification, liability assessment, developing damages scenarios, and post settlement or judgment distributions.

Professional and Business Experience

Representative Engagements

Litigation

» In a class action alleging misleading advertising practices, Stefan performed statistical analyses in the class certification stage.

» For a major healthcare provider involved in a dispute with a potential class of more than 3,000 other providers over allegedly excessive outlier payments Stefan performed economic and statistical analyses. Ultimately, class certification was denied in that case.

» In a class action alleging discriminatory allocation of public funds by a large metropolitan transportation authority, Stefan performed statistical analyses of transportation data.

» In a multi-plaintiff case against a state authority on improper funding of special education programs, Stefan performed statistical analyses of funding related ledger data.

» In a class action alleging improper practices of charges for gym memberships, Stefan performed statistical analyses in the class certification analysis. Based on the analysis, the ultimately certified class was significant smaller than initially defined. In this case, Stefan also developed statistical models to assess damages.

- In a class action alleging losses to consumers due to faulty window regulators in automobiles, Stefan utilized statistical models to assess economic damages.

- In a class action against a large financial institution alleging fee overcharges for personal trust accounts, Stefan utilized statistical analyses to segment the account holders and ultimately reduce the size of the class.

- In a class action case where a provider of a used car evaluation model was ordered by the court to test if their model did not significantly undervalued cars, Stefan performed statistical analyses.

- In a class action case over fee overcharges in the payment process of car insurance, Stefan developed a distribution model of repayments to class members after a settlement had been reached.

- In a class action of home owners over alleged diminution of property values due to proximity to a plume of contaminated soil, Stefan performed statistical analysis to assist counsel in a motion against class certification.

- In a natural resource damage class action case, Stefan provided econometric analysis of property value loss due to proximity to a solid waste site utilizing hedonic regression models.

- For a class action case involving potential damage from a landfill in a state park, Stefan analyzed data about travel, tourism and park attendance. Stefan specified and estimated linear regression models and time series models to predict park attendance.

- In a class action case involving alleged diminution of property values due to ground-water contamination, Stefan specified and estimated hedonic regression models to show that other factors than the contamination contributed significantly to the loss in property value.

- In a class action against a large financial institution alleging non-payment of coupon payments for bearer bonds Stefan designed and administered large-scale databases to reconstruct accounting records of a large financial institution's Corporate Trust Department. He developed statistical models to analyze bondholders' presentment behavior of Bearer bonds.

- In a class action dispute between the Department of Interior and individual Native Americans over mismanagement of individual trust accounts, Stefan performed a statistical analysis of an electronic database with approximately 60 million records in order to draw a statistically valid sample of accounts for further analysis.

- In a trademark infringement case of video equipment, Stefan calculated damages based on the defendant's unjust enrichment utilizing statistical time trend models.

- For a shareholder derivative action against a leading publicly-traded health care provider, employed an econometric approach to quantify potential damages per share due to alleged section 10b-5 violations and other claims. For the same matter, developed a multi-trader model to estimate the number of shares potentially damaged.

- In a dispute between a major health care provider and private payor groups, Stefan developed statistical stratified sampling models to assess exposure across different contract types.

- For a large financial institution's personal trust department involved in a consumer class action, Stefan designed a random sample to estimate the potential exposure due to fee overcharges.

- For a computer equipment leasing company involved in an employee class action, Stefan utilized statistical models to estimate exposure due to alleged forfeiture of unpaid vacation time in a class action of former and current employees.

- For a limousine company involved in a wage and hour class action, Stefan developed a statistical sampling based exposure model to quantify the impact of alleged unpaid overtime and missed meal breaks.

- In several cases involving 12 hour shift workers at hospitals Stefan performed rebuttal analyses of plaintiff's damages computations.

- For a large electronic retail chain Stefan calculated exposure based on the failure of paying overtime for store managers.

- For a major department store Stefan performed a statistical analysis of manager surveys where he found significant differences in the managers' allocation of time across department and stores. Ultimately, due to these differences a class was not certified.

- For a large sporting goods retail chain Stefan assisted in defining the size of the potential class and in estimating the potential exposure which led to a favorable, early settlement of the case.

- For a women's shoes retail chain Stefan designed and statistically analyzed an observational study to quantify the amount of time spent on exempt versus non-exempt tasks.

- For a video rental store chain Stefan developed sampling algorithms based on in-store security cameras to analyze time spent by assistant managers on exempt versus non-exempt activities.

- For a large fast food chain Stefan directed a team collecting employee work information from restaurant locations in order to monitor and gain compliance in response to litigation

- For a large mass merchandiser Stefan developed a document and data reconciliation tool and he developed a statistical sampling mechanism to proof compliance with a court ordered document retention procedures in the course of a wage and hour litigation.

- Stefan worked with a Fortune 500 bank in a class action suit to review the claims of managers that were misclassified and should have been paid overtime. To compute damages, Stefan reviewed the overtime records of employees in this position prior to a job classification change and, in the absence of overtime data after the job classification change, Stefan reviewed sign in and sign out times of the office building.

- For a long-term care provider Stefan used data from timesheets, payroll, and other scheduling records to create comprehensive reports showing potential exposure for each of the claimed areas: timely wage payment, overtime wage payment, adequate daily meal and rest break periods, and travel time compensation.

- For a maternity clothing store chain Stefan performed analyses related to exempt/non-exempt status issues for managers and assistant managers. Stefan also conducted a break time analysis for all employees.

- For a commercial flooring contractor Stefan assessed the job duties and responsibilities of a group of supervisors. During the engagement, the scope of work expanded to include an analysis of misclassification and back-pay exposure for additional groups of employees.

- For a software developer Stefan analyzed how department and project specific characteristics impacted the work flow and the correlation of that impact to certain exemptions.

- For a large meatpacker Stefan conducted a time and motion study to properly assess the duration of certain separately compensated activities to rebut allegations of violation of minimum wage laws.

- For a public university housing department Stefan conducted an extensive time and motion study to identify the tasks (and associated time range to perform each task) related to processing a contract cancellation.

- For a large drugstore chain Stefan used in-store cameras for the smaller stores and actual in-store observations for the larger stores to conduct a time motion study and quantify the time spent by assistant managers on certain pre-defined tasks.

- For a large public storage company Stefan conducted a detailed time and motion study to determine the cost of collection and administration of late payments. Using both self-logging and independent review techniques, Stefan defined each step in the late payment process, calculated the cost to the company for such activities, and compared this cost to the late fees under dispute.

- For a large retail store chain Stefan performed statistical analyses of regularly conducted employee activity surveys.

- For a mass merchandiser, Stefan conducted an observational study of activities of all individuals classified as managers to show significant differences in daily activities.

- For a department store, Stefan conducted an in-store observational study of managers and assistance managers to assess the percentage of time spent on managerial tasks.

- For a state ferry system in the Pacific Northwest, Stefan conducted an observational study of engine room personnel during shift changes to quantify potentially unpaid time worked.

- For a large retail chain Stefan conducted an extensive analysis of the company's compliance with break time rules and regulations and also the employees' usage and potential abuse of break time.

- For a large mass merchandise retailer Stefan compiled a comprehensive database of punch clock data, payroll data, point of sales data, hardcopy information about manual edits of time entries, store security system data, etc. to analyze allegations of inserting breaks, deleting time and forcing employees to work after they clocked out.

- For a large electronic retail chain Stefan analyzed time card data, point of sales data and other store specific attributes to quantify potentially missed meal and rest breaks.

- In a gender discrimination case involving a client in the food processing industry, Stefan analyzed the impact of the implementation of an Affirmative Action Plan on the allegedly discriminatory employment practices.

- In a class action case alleging age discrimination for a vegetable seed company, Stefan performed rebuttal work of the plaintiff's expert's liability and damages analysis.

- In a class action case alleging age discrimination for a major aerospace company, Stefan performed statistical analyses to rebut allegations of age discrimination.

- In a class action race discrimination suit against the Alabama Department of Transportation, Stefan developed statistical regression models and tests to analyze the alleged discrimination.

- In a class action gender discrimination case against a large real estate brokerage firm, Stefan provided deposition testimony to class certification issues.

- In a gender discrimination case against a temporary employment agency, Stefan performed econometric analyses to disprove salary discrimination against two former female employees. Stefan addressed plaintiffs' expert's damages calculations and developed alternative scenarios.

- For a large meat processing plant, Stefan performed statistical analyses of employment data to address allegations of discriminatory hiring practices.

- For a leading publicly-traded developer of enterprise management software, Stefan employed a statistical approach to demonstrate the diversity of investment styles among proposed lead plaintiffs for a securities class action lawsuit alleging section 10b-5 violations and other claims. For the same matter, Stefan employed an econometric approach to estimate potential damages for each lead plaintiff.

- For a leading publicly-traded developer of enterprise management software, Stefan employed an econometric time-series model to analyze allegations of insider trading and the timing of certain stock transactions relative to information available to officers in the company.

- For a shareholder derivative action against a leading publicly-traded health care provider, employed an econometric approach to quantify potential damages per share due to alleged section 10b-5 violations and other claims. For the same matter, developed a multi-trader model to estimate the number of shares potentially damaged.

- For a publicly-traded manufacturer of office supplies, developed a Black-Scholes application and utilized a binomial distribution probability methodology to evaluate the appropriateness of the size of a loan loss reserve related to a loan collateralized by the assets of an employee stock purchase plan.

- For a large software developer, Stefan performed statistical modeling to assist in a securities class action litigation involving allegations of improper revenue recognition, reserve allocations, financial statement disclosures and other accounting irregularities

» For a failed computer hardware company in defense of a 10b-5 securities litigation action, Stefan performed statistical analyses of accounting transactions, inventory and receivable reserves and the auditor's work papers in its evaluation of the allegations.

» In several Rule 10b(5) class actions, Stefan used the event study approach to calculate the value line of a security. In these cases Stefan applied complex and advanced one, two, and multi-trader models.

Non-Litigation

» For large grocery store chains, Stefan analyzed the effectiveness of a frequent shopper card program utilizing data mining techniques. He also analyzed customer data to facilitate the introduction of one-to-one marketing tools.

» For a grocery store chain, Stefan utilized econometric elasticity models to recommend pricing strategies for in-store promotions.

» For a grocery store chain, Stefan developed customer segmentation models to design segment specific marketing campaigns.

» For the American Film Marketing Association, Stefan performed an economic impact study of the influence of the independent film producers and distributors on the U.S. economy in general, and the California economy in particular.

» For a large entertainment client, Stefan developed statistical models to predict the return of video cassettes and DVDs.

» For several clients in the retail industry, Stefan developed statistical models to estimate the liability of unredeemed gift certificates.

» For a client in the restaurant business, Stefan developed statistical models to quantify the dollar amount of outstanding unredeemed gift certificates.

» For a major hotel chain, Stefan developed statistical models to forecast the redemption of frequent traveler program points for tax purposes.

» For a high profile e-commerce company, Stefan's team produced an interactive business decision tool to forecast company growth and profitability. The interactive model allows the client, through the choice of a few fundamental inputs, to measure the simultaneous impact on all cost and revenue dimensions of the company, including real estate and equity participation.

» For the Nevada Resort Association, Stefan quantified the economic impact of the gaming industry with special emphasis on the accelerated population growth in greater Las Vegas.

» For the Los Angeles Unified School District, Stefan performed an economic study about the impact of different recycling programs.

- For the Los Angeles County Department of Health Services, Stefan conducted a time and motion study to determine the time required to complete specific Medi-Cal eligibility and provider forms.

- For the Arizona Tax Research Association, Stefan developed economic models to quantify the revenue impact of a proposed change of taxation in the construction sector in Arizona.

- For a hotel property management company, Stefan analyzed customer data, and used data mining methods to develop predictive models for customer acquisition, retention, and attrition.

- For a project analyzing the extent of competition in the market segments of a pipeline company, Stefan estimated regression and Tobit-models to determine optimal bidding behavior for gas storage demand. He prepared testimony given in filings before the Federal Energy Regulatory Commission (FERC).

- For a hotel property management company, Stefan developed a demand driven yield management system.

- For a company providing self-storage space, Stefan developed a demand driven price-setting strategy utilizing own- and cross-price elasticity regression models.

- For a high-tech start-up with a unique service offering of new products, Stefan recommended product-pricing scenarios.

- For a large international conglomerate, Stefan developed customized data mining techniques for the implementation within a customer knowledge management system.

- For a large law firm, Stefan performed a comprehensive statistical analysis of Los Angeles Superior Court jury verdicts over the last decade. The project tested the hypothesis of systematic bias in particular courthouses with respect to plaintiff-win probability, length of trial, length of deliberation, and dollar amounts awarded.

Depositions & Testimony

Depositions

1. MRO Communications, Inc vs. American Telephone and Telegraph Company, United States District Court District of Nevada, Case. No. -5-95-903-PMP, Deposition Testimony, September 26, 1996

2. Yolanda Aiello Harris, individually and on behalf of all others similarly situated; Jennifer Hopkins, individually and on behalf of others similarly situated; Shannon L. Bradley, individually and on behalf of others similarly situated, Plaintiffs, vs. CB Richard Ellis, Inc., a California corporation; CB Commercial INC., a California corporation; Defendants, Superior Court of California, County of San Diego, Case No. GIC 745044, Deposition Testimony, January 5, 2001.

3. State of Tennessee, ex rel., Douglas Sizemore, Petitioner vs. Xantus Healthplan of Tennessee, Inc., Chancery Court of Davidson County, Tennessee at Nashville, Case No 99-917-II, Deposition Testimony, October 11, 2001.

4. Howard Wright, Inc., a California corporation doing business as AppleOne Employment Services, Plaintiffs, vs. Olsen Staffing Services, Inc., a Delaware Corporation, Dagney Smith, an individual, Vicky Riechers, an individual, and Linda Shiftman, an individual, Defendants, Superior Court of the State of California for the County of Los Angeles, Case No. BC 200657, Deposition Testimony, December 7, 2001.

5. Sacred Heart Medical Center, et al., Plaintiffs, -vs- Department of Social and Health Services, and Dennis Braddock, the Secretary of the Department of Social and Health Services, Defendants, Superior Court of the State of Washington in and for the County of Thurston, No. 00-2-01898-1, Deposition Testimony, January 23, 2003.

6. Patrick Bjorkquist individually and on behalf of all others similarly situated, Plaintiff, vs. Farmers Insurance Company of Washington, Defendant, in the Superior Court of the State of Washington for King County, Case No.: 02-2-11684-1 SEA, Deposition Testimony, November 3, 2003.

7. Diversified Property, a general partnership, Dora Saikhon Family Trust, and Nancy Saikhon Borrelli, an individual, Plaintiffs vs. Manufacturers Life Insurance (U.S.A.), a Michigan corporation, erroneously sued as Manufacturers Life Insurance Company, Inc., Defendants in the Superior Court of California, County of San Diego, Case No.: GIC 815128, Deposition Testimony on July 21, 2004.

8. Alan Powers, Plaintiff, vs. Laramar Group et al., Defendants in the United States District Court, Northern District of California, No. C-02-3755 SBA, Deposition Testimony on August 27, 2004.

9. Group Anesthesia Services, A Medical Group, Inc., Claimant, vs. American Medical Partners of North Carolina, Inc., etc., et al., Respondents, JAMS Arbitration, Reference No. 1100040919, Deposition Testimony on February 9, 2005.

10. Group Anesthesia Services, A Medical Group, Inc., Claimant, vs. American Medical Partners of North Carolina, Inc., etc., et al., Respondents, JAMS Arbitration, Reference No. 1100040919, Deposition Testimony on March 11, 2005.

11. Fujitsu v. Cirrus Logic et al., United States District Court, Northern District of California, San Jose Division, Case No. 02CV01627. Deposition Testimony on April 21 and 22, 2005.

12. Goldman et al. v. RadioShack Corporation, United States District Court, Eastern District of Pennsylvania, Case No. 03 CV 0032, Deposition Testimony on May 18, 2005.

13. Perez et al. v. RadioShack Corporation, United States District Court, Northern District of Illinois, Eastern Division, Case No. 02-CV-7884, Deposition Testimony on December 13, 2005.

14. United States of America ex rel. A. Scott Pogue v. American Healthcorp Inc., Diabetes Treatment Centers of America Inc., et al., United States District Court, Middle District of Tennessee at Nashville, Civil No. 3-94-0515, Deposition Testimony on May 12, 2006.

15. School Districts' Alliance v. State of Washington, United States District Court, Eastern District of Thurston, Case No. 04-2-02000-7, Deposition Testimony on July 20, 2006.

16. Boca Raton Community Hospital, Inc., a Florida not-for-profit corporation d/b/a Boca Raton Community Hospital, on behalf of itself and on behalf of Class of all others similarly situated v. Tenet Healthcare Corp., a Nevada Corporation, United States District Court, Southern District of Florida, Miami Division, Case No. 05-80183-CIV-SEITZ/MCALILEY, Deposition Testimony on July 25, 2006.

17. Boca Raton Community Hospital, Inc., a Florida not-for-profit corporation d/b/a Boca Raton Community Hospital, on behalf of itself and on behalf of Class of all others similarly situated v. Tenet Healthcare Corp., a Nevada Corporation, United States District Court, Southern District of Florida, Miami Division, Case No. 05-80183-CIV-SEITZ/MCALILEY, Deposition Testimony on October 13, 2006.

18. Louise Ogborn v. McDonald's Corporation et al., Commonwealth of Kentucky 55th Judicial District, Bullitt County Circuit Court, Case No. 04-CI-00769, Deposition Testimony on October 19, 2006.

19. Elise Davis v. Kohl's Department Stores, Inc. consolidated with Rosie Grindstaff v. Kohl's Department Stores, Inc., Superior Court of the State of California for County of Los Angeles Central District, Case No. BC 327426 (lead case) consolidated with Case No. BC 341954, Deposition Testimony on April 25, 2007.

20. Norman Utley, et al., v. MCI, Inc., MCI Worldcom Communications, Inc., and MCI Network Services, Inc., formerly known as MCI Worldcom Network Services, Inc., United States District Court, Northern District of Texas, Dallas Division, Civil Action No. 3:05 - CV- 0046 - K, Deposition Testimony on May 30, 2007.

21. Ramon Moreno and Ernesto Morailo, on behalf of themselves and all others similarly situated v. Guerrero Mexican Food Products Inc., a division of Gruma Corporation; and Gruma Corporation, a Nevada Corporation, United States District Court, Central District of California, Case No. CV05-773RSWL(PLAx), Deposition Testimony on August 10, 2007.

22. Darensburg et al. v. Metropolitan Transportation Commission, U.S. District Court, Northern District of California, Case No. C-05-1597-EDL, Deposition Testimony on March 18, 2008.

23. In Re: King Pharmaceuticals, INC, Derivative Litigation, Lead Case No: BOO19077(M), The Chancery Court, Sullivan County at Bristol, Tennessee, Deposition Testimony on April 4, 2008.

24. P. Ansley et al. v. Lewis Homes of California, a California General Partnership, et al., Superior Court of the State of California, For the County of Solano, Case No. FCS02445, Deposition Testimony on April 10, 2008.

25. Personnel Plus v. Ashish Wahi et al., Superior Court of the State of California, County of Orange, Case No. 07CC08363, Deposition Testimony on August 13, 2008.

26. First Capitol Consulting Inc. v. LVX, Inc. et al., Superior Court of the State of California for the County of Los Angeles, Case No. BC378202, Deposition Testimony on October 27, 2008.

27. R. Molina et al. v. Lexmark International, Inc., Superior Court of the State of California for the County of Los Angeles, Case No. BC339177, Deposition Testimony on November 19, 2008.

28. In re National Century Financial Enterprises, Inc. Investment Litigation, No. 2:03-MD-1565-JLG-MRA (S.D.Ohio), Deposition Testimony on January 22, 2009.

29. New York City Employees' Retirement System, et al. v. Bank One, N.A., et al., Case No. 03-cv-09973 (LAK) (S.D.N.Y.), Deposition Testimony on January 22, 2009.

30. Dole Fresh Fruit International, Ltd, Hyundai Precision America, Inc., JAMS Arbitration, ADRS Case #05-1138-RTA, Deposition Testimony on December 21, 2009.

31. D. Berry, L. Hedges et al. v. Volkswagen of America, Inc. In The Circuit Court of Jackson County, Missouri, at Independence, No. 0516-CV01171 Division 2, Deposition Testimony on February 18, 2010.

32. D. Aberle et al. v. Davidson Builders, Inc., et al., Superior Court of the State of California, County of Orange, Case No.: 37-2008-00083718-CU-CD-CTL, Deposition Testimony on March 24, 2010.

33. Urga, et al. v. Redlands Community Hospital, Superior Court of the State of California, County of San Bernardino, Case No. SCVSS 123769, Deposition Testimony on May 17, 2010.

34. Oberschlake, et al v. St. Joseph Hospital of Orange, et al, Superior Court of the State of California, County of Orange, Case No. 05CC00301, Deposition Testimony on August 12, 2010.

35. J. Morrison v. The Vons Companies, Inc., Superior Court of State of California, County of San Diego, Case No. 37-2009-00081026-CU-BT-CTL, Deposition Testimony on December 7, 2010

36. R. Pate, et al. v. Children's Hospital of Orange County, Superior Court of California, County of Orange, Case No. 05CC00303, Deposition Testimony on April 13, 2011.

37. M. St. Croix, et al. v. Cedar Fair, L.P., et al., Superior Court of California, County of Orange, Case No. 30-2008-0214500, Deposition Testimony on August 22, 2011.

38. Steven Domalewski, a minor v. Hillerich and Bradsby Co., et al., Superior Court of New Jersey, Passaic County, Docket No.: PAS-L-2119-08, Deposition Testimony on January 5, 2012.

39. Cathleen McDonough, et al., v. Horizon Blue Cross/Blue Shield of New Jersey, United States District Court, District of New Jersey, Civil Action No. 09-cv-00571-(SRC) (PC), Deposition Testimony on January 10, 2012.

40. Daniel Ordonez, et al., v. Radio Shack, United States District Court, Central District of California, Case No. CV 10-07060 CAS (JCGx), Deposition Testimony on October 24, 2012.

41. Ameritox, Ltd., v. Millennium Laboratories, Inc., United States District Court, Middle District of Florida, Case No. 8:11-cv-00775-SCB-TBM, Deposition Testimony on December 20, 2013.

42. United States of America, ex rel. Glenda Martin v. Life Care Centers of America, Inc., United States District Court Eastern District of Tennessee at Chattanooga, Civ. Action No. 1:08-CV-251, Deposition Testimony on January 15, 2014.

43. United States of America, ex rel. Tammie Taylor v. Life Care Centers of America, Inc., United States District Court Eastern District of Tennessee at Chattanooga, Civ. Action No. 1:12-CV-64, Deposition Testimony on January 15, 2014.

44. Darren Smith, et al., v. Panera Bread Company, Superior Court of California, County of San Diego, Case No. 37-201-00084077 CU-BT-CTL, Deposition Testimony on April 30, 2014.

45. Joseph Hummel et al., v. Castle Principles, LLC et al., Superior Court of California, County of Santa Clara, Case No. 112CV223170, Deposition Testimony on June 19, 2014.

46. Sherman Way Oil, Inc. (Bijan Pouldar), American Pacific Enterprises Group (Sherwin Louie), Bahman Kohanteb, Hamid Kalhor , Claimants, Vs. Circle K Stores, Inc., Respondent, Alternative Dispute Resolution Case No's 13-7103-DSC through 13-7106-DSC, Deposition Testimony on September 25, 2014.

47. In re: ExxonMobil Oil Corporation, et al., Southern California Bulk Sale Litigation, Case No. CV12-04689-PA (VBKx), Deposition Testimony on September 25, 2014.

48. Oracle Wage and Hour Cases, Raghunandam Matam et al., v. Oracle Corporation, Superior Court of California, County of Alameda, No. RG-09480164, Deposition Testimony, October 21, 2014.

49. G. Taylor et al. v. Shippers Transport Express, Inc., et al., United States District Court, Central District of California, Case No.: CV13-02092-BRO (PLAx), Deposition Testimony on October 24, 2014.

50. Denise Mays et al. v. Children's Hospital of Los Angeles, Superior Court of California, County of Los Angeles, Case No. BC477830, Deposition Testimony on March 17, 2015.

51. Direct General Insurance Company v. Indian Harbor Insurance Company et al., United States District Court, Southern District of Florida, Miami Division, Case No. 14-20050-CIV-Cooke/Torres, Deposition Testimony on March 27, 2015.

52. Dennis Dickman v. Gerdau Reinforcing Steel, et al., Superior Court of California, County of San Bernardino, Case No. CIV-DS-1406231, Deposition Testimony on July 7, 2015.

53. Fred Devries, et al. v. Morgan Stanley & Co. LLC, et al., United States District Court, Southern District of Florida, Case No. 9:12-cv-81223-KAM, Deposition Testimony on July 31, 2015.

54. Dennis Dickman v. Gerdau Reinforcing Steel, et al., Superior Court of California, County of San Bernardino, Case No. CIV-DS-1406231, Deposition Testimony on September 11, 2015

55. Leah Davis, and Amy Krajec, et al. v. St. Jude Hospital, Superior Court of California, County of Orange, Case No. 30-2012-00602596-CU-OE-CXC, Deposition Testimony on January 19, 2016.

56. In re MyFord Touch Consumer Litigation, Whalen, et al. vs. Ford Motor Company, United States District Court Northern District of California San Francisco Division, Case No. 13-cv-3072-EMC, Deposition Testimony on February 23, 2016.

57. United States of America, ex rel. Glenda Martin v. Life Care Centers of America, Inc., United States District court Eastern District of Tennessee at Chattanooga, Civ. Action No. 1:08-CV-251 & United States of America, ex rel. Tammie Taylor v. Life Care Centers of America, Inc., United States District court Eastern District of Tennessee at Chattanooga, Civ. Action No. 1:12-CV-64, Deposition Testimony on March 4, 2016.

58. The United States of America and the State of Florida ex rel. Angela Ruckh v. CMC II LLC, United States District court for the Middle District of Florida Tampa Division, Civil Action No. 8:11 CV 1303 SDM-TBM, Deposition Testimony on March 16, 2016.

59. Bertha Sanchez, et al. v. St. Mary Medical Center, et al., Superior Court of the State of California for the County of San Bernardino, Case No. CIVDS 1304898, Deposition Testimony on July 13, 2016.

60. Christian Juarez, et al v. Dignity Health, a California corporation, et al., Superior Court of the State of California, County of Los Angeles, Central Civil West District, Case No. BC550950, Deposition Testimony on August 15, 2016.

61. In Re Dial Complete Marketing and Sales Practices Litigation, United States District Court, District of New Hampshire, Case No. 11-md-2263-SM (MDL Docket No. 2263), Deposition Testimony on August 30, 2016.

62. In Re: Myford Touch Consumer Litigation, United States District Court, Northern District of California, San Francisco Division, Case No. 13-cv-3072-EMC, Deposition Testimony on September 16, 2016.

63. United Healthcare Insurance Company v. Lincare Inc., Case Improvement Plus of Texas Insurance Company: Care Improvement Plus South Central Insurance Company: Care Improvement Plus of Maryland, Inc. v. Lincare Inc., In An Arbitration Before the American Arbitration Association, Case No. 01-15-0003-4095, Deposition Testimony on December 21, 2016.

64. The Moses H. Cone Memorial Hospital Operating Corporation d/b/a Cone Health v. Springfield Service Corporation d/b/a SPI Healthcare, United States District Court for the Middle District of North Carolina, Civil Action No. 1:13-cv-651, Deposition Testimony on January 17, 2017.

65. The People of the State of California, acting by and through Orange County District Attorney Tony Rackauckas v. General Motors LLC, Superior Court of the State of California in and for the County of Orange Complex Litigation Division, Case No. 30-2014-00731038-CU-BT-CX, Deposition Testimony on April 20 and 21, 2017.

66. In Re: Emerson Electric Co. Wet/Dry Vac Marketing And Sales Litigation, United States District Court for the Eastern District of Missouri, MDL No. 2382, Civil Action No. 4:12-md-2382-HEA, Deposition Testimony on May 17, 2017.

67. The People of the State of California, acting by and through Orange County District Attorney Tony Rackauckas v. General Motors LLC, Superior Court of the State of California in and for the County of Orange Complex Litigation Division, Case No. 30-2014-00731038-CU-BT-CX, Rebuttal Deposition Testimony on June 13, 2017.

68. Clayton Dezan, et al. v. Dignity Health, a California Corporation; Community Hospital of San Bernardino, et al, Superior Court of The State of California for the County of San Bernardino, Case No. CIVDS1516658, Deposition Testimony on August 22, 2017.

69. Millennium Health, LLC v. Blue Shield of California, Counterclaim, Blue Shields of California v. Millennium Health, LLC, American Arbitration Association, Case No. 01-15-0005-5926, Deposition Testimony on August 24, 2017.

70. Matthew Townsend, et al. v. Monster Beverage Corporation and Monster Energy Company, United States District Court Central District of California, Case No. 5:12-cv-02188 VAP (KKx), Deposition Testimony on September 20, 2017.

71. Welltower Inc., v. Scott M. Brinker, In the Court of Common Pleas Lucas County, Ohio, Case No. CI-17-2692, Deposition Testimony on October 4th, 2017.

72. In Re Seagate Technology LLC Litigation, United States District Court, Northern District of California San Jose Division, Case No. 5:16-cv00523-RMW, Deposition Testimony on December 12th, 2017.

73. Joanne Hart and Sandra Bueno v. BHH, LLC d/b/a Bell + Howell and Van Hauser LLC, United States District Court for the Southern District of New York, Case No. 1:15-CV-04804-WHP, Deposition Testimony on January 26th, 2018.

74. Thomas Davidson, et al v. Apple Inc., United States District Court Northern District of California San Jose Division, Case No. 5:16-cv-04942-LHK, Deposition Testimony on January 29, 2018.

75. In Re: General Motors, LLC Ignition Switch Litigation, United States District Court Southern District Of New York, Case No. 14-MD-2543 (JMF), Deposition Testimony on February 6th and 7th, 2018.

Testimony

1. State of Tennessee, ex rel., Douglas Sizemore, Petitioner vs. Xantus Healthplan of Tennessee, Inc., Chancery Court of Davidson County, Tennessee at Nashville, Case No 99-917-II, Trial Testimony, October 16, 2001.

2. State of Tennessee, ex rel., Douglas Sizemore, Petitioner vs. Xantus Healthplan of Tennessee, Inc., Chancery Court of Davidson County, Tennessee at Nashville, Case No 99-917-II, Rebuttal Testimony, October 26, 2001.

3. Howard Wright, Inc., a California corporation doing business as AppleOne Employment Services, Plaintiffs, vs. Olsen Staffing Services, Inc., a Delaware Corporation, Dagney Smith, an individual, Vicky Riechers, an individual, and Linda Shiftman, an individual, Defendants, Superior Court of the State of California for the County of Los Angeles, Case No. BC 200657, Trial Testimony, March 4, 2002.

4. Columbia/HCA Healthcare Corporation - Billing Practices Litigation, United States District Court, Middle District of Tennessee, Nashville Division, Case No. 3-98-MDL-1227 on June 28, 2002.

5. Sacred Heart Medical Center, et al., Plaintiffs v. Department of Social and Health Services, and Dennis Braddock, the Secretary of the Department of Social and Health Services, Defendants, Superior Court of the State of Washington in and for the County of Thurston, No. 00-2-01898-1, Testimony in Liability Trial, April 14, 2003.

6. Diversified Property, a general partnership, Dora Saikhon Family Trust, and Nancy Saikhon Borrelli, an individual, Plaintiffs v. Manufacturers Life Insurance (U.S.A.), a Michigan corporation, erroneously sued as Manufacturers Life Insurance Company, Inc., Defendants in the Superior Court of California, County of San Diego, Case No.: GIC 815128, Trial Testimony on October 25, 2004.

7. Bridgestone/Firestone North American Tire v. Sompo Japan Ins. Co. of America, United States District Court for the Middle District of Tennessee Nashville Division Civil Action NO. 3-02-1117, March 7, 2005

8. Group Anesthesia Services, A Medical Group, Inc., Claimant, vs. American Medical Partners of North Carolina, Inc., etc., et al., Respondents, JAMS Arbitration, Reference No. 1100040919, Arbitration Testimony on March 23, 2005.

9. Goldman et al. v. RadioShack Corporation, United States District Court, Eastern District of Pennsylvania, Case No. 03 CV 0032, Testimony in Liability Trial, on June 28 and 29, 2005.

10. Goldman et al. v. RadioShack Corporation, United States District Court, Eastern District of Pennsylvania, Case No. 03 CV 0032, Rebuttal Testimony in Liability Trial, on July 5, 2005.

11. Mauna Loa Vacation Ownership LLP v. Accelerated Assets, LLP. United States District Court, District of Arizona, Case No. CIV 03-0846 PCT DGC. Trial Testimony, on February 22, 2006.

12. School Districts' Alliance v. State of Washington, United States District Court, Eastern District of Thurston, Case No. 04-2-02000-7, Trial Testimony on November 13, 2006.

13. In the Matter of Premier Medical Group, PC, Appellant – Department of Health and Human Services, Office of Medicare Hearings and Appeals, Southern Field Office, ALJ Appeal No. 1-221579701, Medicare Appeal No. 1-18761858, Provider No. 3706654, AR No. 9406352171039, Judge Zaring Robertson, US Administrative Law Judge, Testimony on April 1, 2008.

14. Darensburg et al. v. Metropolitan Transportation Commission, U.S. District Court, Northern District of California, Case No. C-05-1597-EDL, Trial Testimony on October 9, 2008.

15. R. Molina et al. v. Lexmark International, Inc., Superior Court of the State of California for the County of Los Angeles, Case No. BC339177, Trial Testimony on October 22 and 26, 2009.

16. Dole Fresh Fruit International, Ltd, Hyundai Precision America, Inc., ADRS Case #05-1138-RTA, Trial Testimony on February 19, 2010.

17. In the matter of University of Tennessee Cancer Institute, ALJ Appeal No. 1-446 575 318, Office of Medicare Hearings & Appeals, Judge Z. Robertson, US Administrative Law Judge, Testimony on April 20, 2010.

18. Urga, et al. v. Redlands Community Hospital, Superior Court of the State of California, County of San Bernardino, Case No. SCVSS 123769, Trial Testimony on July 20, 2010.

19. Marine Engineers' Beneficial Association v. Department of Transportation, Ferries Division Federal Mediation & Conciliation Service Cause No. 110105-52404-6 AGO Matter No. 10499471, July 19, 2011.

20. Richard Robinson v. County of Los Angeles, et. al., United States District Court of California, Central District, Case No. CV06-2409 GAF (VBKx), Trial Testimony on December 1, 2011.

21. In the matter of American Home Patient, ALJ Hearing, Appeal No. 1-982137828, Office of Medicare Hearings & Appeals, Miami Office Southern Field Division, Testimony on October 29, 2012.

22. In the matter of American Home Patient, ALJ Hearing, Appeal No. 1-924297238, Office of Medicare Hearings & Appeals, Irvine Office Western Field Division, Hearing Testimony on February 28, 2013.

23. TaylorMade Golf Company Challenge to Callaway Golf Company's Final Response, National Advertising Division, New York, Testimony on March 13, 2013.

24. United States of America, ex rel. Tammie Taylor v. Life Care Centers of America, Inc., United States District Court Eastern District of Tennessee at Chattanooga, Civ. Action No. 1:12-CV-64, Testimony on May 13, 2014.

25. United States of America v. Houshang Pavehzadeh, United States District Court for the Central District of California, No. CR 13-0320-R, Testimony on May 19, 2014.

26. Sherman Way Oil, Inc. (Bijan Pouldar), American Pacific Enterprises Group (Sherwin Louie), Bahman Kohanteb, Hamid Kalhor , Claimants, Vs. Circle K Stores, Inc., Respondent, Alternative Dispute Resolution Case No's 13-7103-DSC through 13-7106-DSC, Arbitration Testimony on October 10, 2014.

27. Heidi's Children Dental Center (DC14-0813-204-LM) vs. Denti-Cal, Testimony at Administrative Law Judge Hearing, Judge Lewis Munoz, in Los Angeles on November 5, 2014.

28. AdvanceMed Audit of Altercare of Wadsworth, Medicare Appeal, Medicare Appeal No. 1-912446681, Bertha Sanchez, et al. v. St. Mary Medical Center, et al., Superior Court of the State of California for the County of San Bernardino, Case No. CIVDS 1304898, Certification Hearing Testimony on October 21, 2016.

29. Michael Bozsik v. Livingston International Inc., Ontario Superior Court of Justice, Court File No. 5270/14, Cross Examination Testimony on May 12, 2016.

30. Bertha Sanchez, et al. v. St. Mary Medical Center, et al., Superior Court of the State of California for the County of San Bernardino, Case No. CIVDS 1304898, Certification Hearing Testimony on October 21, 2016.

31. In Re Dial complete Marketing and Sales Practice Litigation, United States District Court, District of New Hampshire, Case No. 11-md-2263-SM (MDL Docket No. 2263), Hearing Testimony on November 16, 2016.

32. United Healthcare Insurance Company v. Lincare Inc., Case Improvement Plus of Texas Insurance Company: Care Improvement Plus South Central Insurance Company: Care Improvement Plus of Maryland, Inc. v. Lincare Inc., In An Arbitration Before the American Arbitration Association, Case No. 01-15-0003-4095, Arbitration Testimony on February 6, 2017.

33. The United States of America and The State of Florida ex rel. Angela Ruckh v. CMC II, LLC, United States District Court for the Middle District of Florida Tampa Division, Civil Action No. 8:11 CV 1303 SDM-TBM, Trial Testimony on February 8, 2017.

34. Federal Government of Germany v. A Consortium of Publicly Traded Companies in an arbitration under the laws of Germany, Arbitration Testimony on March 21 and 22, 2017.

35. In Re Determination of Royalty Rates and Terms for Transmission of Sound Recordings by Satellite Radio and "Preexisting" Subscription Services (SDARS III), United States Copyright Royalty Judges The Library of Congress Washington, D.C., Docket No. 16-CRB-0001-SR/PSSR (2018-2022), Trial Testimony on May 9, 2017.

36. ZPIC Audit Appeal of Providence Health System Southern California, Office of Medicare Hearings and Appeals, OMHA Appeal Number 1-1823418684, Hearing Testimony on October 16, 2017.

Publications

Boedeker, Stefan and Goetz Trenkler (2001) - "A Comparison of the Ridge and Iteration Estimator" - in: Econometric Studies: A Festschrift in Honour of Joachim Frohn (ed. by Ralph Friedmann, Lothar Knueppel, and Helmut Luetkepohl), New Brunswick

Professional and Business History

- Berkeley Research Group, 2010 - Present, Managing Director
- Resolution Economics, 2008 - 2010, Partner
- Alvarez & Marsal, 2007 - 2008, Managing Director
- LECG LLC, 2005 - 2007, Director
- Navigant Consulting Inc., 2004 -2005, Managing Director in Litigation and Investigation Practice
- Deloitte & Touche LLP, 2003 - 2004, Leader of the Economic and Statistical Consulting Practice in the West Region
- PricewaterhouseCoopers LLP, 2002 - 2003, Leader of the Litigation Consulting Group in Los Angeles, Leader of the Economic and Statistical Consulting Practice in the West Region
- Andersen LLP, 1992 - 2002, Partner (since 2000), last position held: Director of Economic and Statistical Consulting practice in the Pacific Region
- University of California, San Diego, 1989 - 1991, Teaching Assistant, Department of Economics
- German Government, 1986 - 1989, Economic Research Assistant